

AMERICAN CATTLE PRODUCER

Volume XVIII

DENVER, COLORADO

Number 7



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OFFICIAL ORGAN OF THE
AMERICAN NATIONAL LIVE STOCK
ASSOCIATION

PUBLISHED MONTHLY

ONE DOLLAR A YEAR



LOWER PRICES FOR FROZEN BEEF AND LAMB

There is a difference in the kind of refrigeration used for fresh meat and for freezing meat. When meat is frozen, the ordinary layman says that it is put in "cold storage." Less than two per cent of its beef and lamb is placed by Swift & Company in what is termed "cold storage."

Retail meat dealers will not pay within two or three cents a pound as much for beef and lamb that have been frozen and from which they expect to cut steaks, chops, roasts, etc., as they will for unfrozen.

This difference in price is made notwithstanding the fact that Swift & Company believes frozen

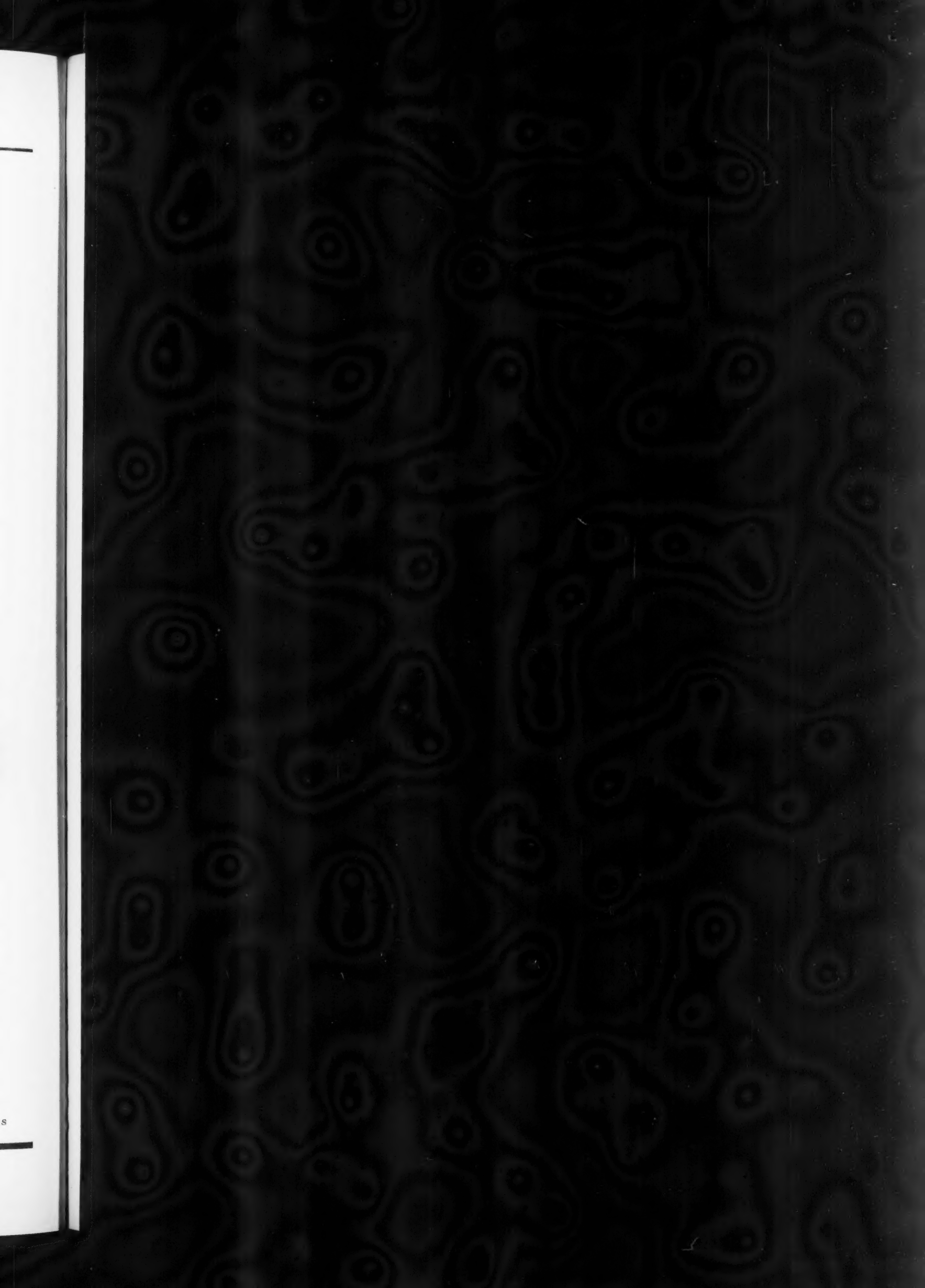
beef and lamb are worth just as much as unfrozen.

On the average only about 1.9 per cent of the total beef produced in the United States in one year and approximately .9 per cent of the total lamb are frozen. These small amounts of beef and lamb that are frozen are mainly used in the manufacture of sausage products and other prepared meats.

From this it can be seen that meat packers do not buy cattle and lambs in times of big receipts, freeze the meat from them, and in that way make a big profit. Over a period of years, Swift & Company's net profits from all sources have averaged only a fraction of a cent per pound.

Swift & Company

In daily touch with every meat, poultry and dairy consuming city, town, and hamlet in the United States



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The Mormons and Their Cattle

BY WILL C. BARNES

Phoenix, Arizona

I. Some Early Open-Range Experiences

THE SOUTHWEST WAS ORIGINALLY "populated" with cattle of the longhorn type—huge, rawboned, high-hipped animals, with long horns that did not curl upward, as do the horns of the present popular Brahman cattle, but had a distinctive side twist that gave them the great spread from tip to tip for which they were noted.

As early as 1865 the Mormon settlers in Utah began pushing out to the south, seeking new fields for expansion and settlement. They were true pioneers, those early Mormons. No hardships from desert wastes or dangers from savage Indians kept them from exploring the country around their first location on the shores of the Great Salt Lake. The majority of them came from the Corn Belt region of southern Illinois. They made that long, hazardous, trying trek across the Great Plains, many of them walking the entire distance, with their modest possessions piled in heavy wagons and carts, a few of which were drawn by the excellent type of draft horses of those days, but mostly the motive power was their fine oxen. The great number of these people were farmers who brought with them not only farming tools but live stock as well.

Cattle of Real Duality

Their cattle especially were unusually well-bred. They were nearly all milk stock, and one dear old Mormon mother told me many years ago that most of the cattle her husband and her father brought with them to Utah were milk cows only so long as the lacteal fluid held out. When "Old Boss" went dry she was decorated with a huge oxen yoke and became, so the lady explained, "a mere draught animal." A dual-purpose animal, if you please.

"The mere fact," she continued, "that she had been a milk cow did not keep us from working her when the necessity arose. It was a long, hard road we were

traveling, and we needed every available animal to pull those heavy wagons through the sandy washes or over the steep mountains. When she again became 'fresh' she was relieved of her yoke and trudged along with the rest of the loose cattle being milked twice a day.

"We had lots of babies and very young children for whom the milk was a vital necessity. Those dry milk cows, however, could pull a load as well as any ox that ever wore a yoke."

A few years ago the writer saw in China, India, Egypt, and the Holy Land any number of dry cows and young heifers working side by side with a long-legged camel or an equally short-legged burro, sometimes one of their diminutive ponies. Once in China, the cow's calf followed behind the plow, voicing in no uncertain tones his disgust at his mother's enforced labor.

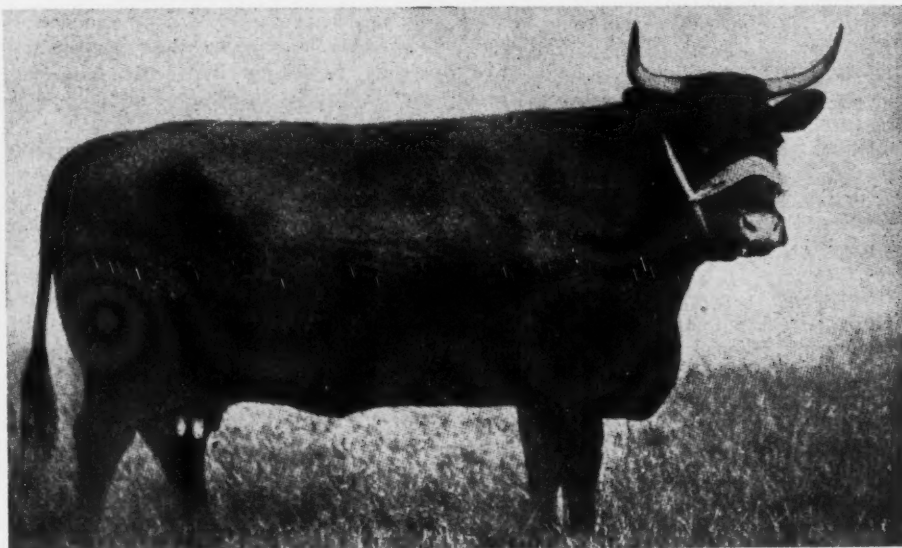
The first of these Mormon colonists from Utah crossed the huge canyon of the Colorado River and really entered

northern Arizona early in 1875. Naturally they brought with them cattle, horses, and other domestic animals with which to stock up the new grazing ranges they hoped to find. They located a number of settlements along the Little Colorado River in northern Arizona, and their live stock did well from the very first day on the rich virgin ranges that they found unused except for the elk, deer, and antelopes which swarmed over them.

One of their most successful locations was at what is known today as the "Mormon Lake," about thirty-five miles south of the city of Flagstaff, Arizona. This lake is a huge depression in the great open valley, many miles long and several wide. It was not a natural lake but merely a flood reservoir, holding water as long as the seasons provided plenty of rain in the summer and deep snows in the winter. I have seen it as dry as the proverbial "powder house" during at least three years in the past fifty, due entirely to scanty rain and snowfall and heavy evaporation.

The Mormon Dairy

Here the Mormons came in the summer of 1878, bringing with them from the valley below over a hundred head of



DEVON COW—SOLID RED IN COLOR, WHITE ONLY ON UDDER AND SWITCH

fine milk cattle. They established themselves on some large springs at the west end of the lake which ever since then has been known as "The Mormon Dairy." On these springs they engaged in the dairy business, turning out butter and cheese on a fairly large scale. The elevation at the lake is something over 7,000 feet, with delightfully cool summers, making it an ideal place for the dairy business.

The writer first saw this settlement in 1885. The lake was then seven or eight miles long. Millions of sea gulls, geese, ducks, and other waterfowl darkened the sky overhead when disturbed, or covered the water by acres.

The water from the springs had been piped into log milk-houses, furnishing excellent refrigeration for their products. At the same time the range all around them was so luxuriant that their surplus stock scarcely got out of sight of the settlement all day long.

What tons of butter and cheese those Mormon women did turn out, to be sold at the mines to the south and, later on, to the thousands of men at work almost at their back doors building the Santa Fe railroad across the territory!

It was the wonderful cattle these Mormons owned in the several Little Colorado settlements that first attracted the writer's attention as early as 1883.

Cherry-Red Devons

Practically 75 per cent of them were Devons, famous always for their milking qualities; the rest were Shorthorns, or Durhams, as then called. But it was the Devons' color that caught one's eyes. The Devons have always been noted for their rich cherry-red coats with hardly a speck of white showing. We were all apparently color-blind in those days, and red cattle were prime favorites. It was often hard to get rid of "off-colored" steers when buyers from Kansas and the Corn Belt markets happened along. A "pied" steer, as the Mexicans and Texas boys called them—white and red or black—was simply anathema to all steer buyers.

Those Mormons surely had been mighty "choosey" in this color matter, and brought with them clear across the continent a lot of Devon cattle that were as alike in color and build as a box of golf balls. With their wonderful milking qualities, these Devons made admirable foundations for their western farm herds.

For several years following the terrible "Mountain Meadows" massacre down in southern Utah, not far from the Arizona line, we early stockmen in nearby Arizona were often asked to buy cattle which the sellers claimed to be descendants of the animals driven by that ill-fated party of emigrants across the plains from northern Arkansas and southern Missouri close along the line of the two states. There, good horses and



LEE'S MONUMENT

cattle have always been part and parcel of the farmers' creed.

Bound for southern California via the southern route, this entire party of about 140 persons, with the exception of seventeen young children not old enough to remember their own names, was ambushed and slaughtered at a camp known as the "Mountain Meadows." They had with them over 300 head of cattle and many horses, which were parceled out among the attackers, who the Mormon people claimed were Indians.

The writer in 1883 bought about fifty head of dark red cows and one grand, old Devon bull somewhat advanced in years from the widow of John D. Lee, the man who was tried and executed for his alleged complicity in the affair.

This aged bull managed, however, to furnish us with at least one crop of vigorous cherry-colored sons and daughters which gave us an admirable addition to our rollicking bunch of longhorns from Texas, with which I started business in 1880.

But as the ranges began to be overstocked and grass short, and an occasional dry summer and hard winter hit us, we found that these well-shaped, rich-colored, broad-backed, big-bellied cows were not at all suitable to the range conditions that began to stare us in the face about 1890. They were farm animals—not rangers. They expected to find their day's supply of feed in mangers and stalls—not scattered round on the ranges. They wanted water when they were thirsty—not about once in every three days. Also they wanted clean fresh water—not the dark, muddy stuff such as the Little Colorado River furnished most of the time.

Herefords Could Take It

And so we turned finally to the Herefords—a comparatively new breed in our part of the range country. In them we found an animal that had not been pampered for generations, that could stand hardship and grief in large chunks, that could walk miles back and forth between feed and water and stand up under it. In fact, Herefords proved to be the salvation of the open-range business. They met all our needs, and it was not many years before they were about the only breed found in all the range country. Especially was that true of the great Southwest, where they fairly took us by storm. Today they are solidly entrenched in the stockmen's hearts. At the same time, the writer of these reminiscences recalls with pleasure his genuine admiration for those cherry-red Devons that the Mormons brought to us in those early days.

An old-time cowboy working for me once made the remark that "first-class cows and horses must have been a part of the Mormon religion, judging by the way the believers in that faith managed to always have them, no matter where they located." And looking back over some fifty years' experience, it is a fact.

II. Story of Mountain Meadows

In October, 1933, the writer and his wife made a voyage of discovery into southern Utah in search of the place where the "Mountain Meadows" massacre took place. This affair occurred at a point some thirty-five miles southwest of the present little town of Cedar City, Utah. It is so far off the main-traveled road as to be very seldom visited by travelers.

The emigrants numbered about 140 men and women, including seventeen children, too young to realize just what happened. All but seventeen of the party—they being the children—were, so the story is told, "slaughtered by Indians." When attacked, the emigrants took refuge in an open valley, where on a little knoll they hurriedly built a rough wall of rocks for shelter. Inside this they dug a shallow pit to give them better protection.

Butchery Under a Truce

After several days of almost hopeless fighting, surrounded on all sides by the savages, they gave it up and marched out under a flag of truce, which they believed would be respected. No sooner had they left their shelter than they were all horribly butchered—there is no other word to express it—and their cattle, horses, and wagons, with all their personal effects brought from the East with them, driven off by their "Indian" attackers. The bodies of the dead were merely dumped into the open pit inside the rock "fort" and a little earth thrown over them by the "Indians." Later on federal troops reached the scene of the

fight, gathered up the remains of the dead fighters, which had been dug up and scattered all over the grassy flat, and gave them a decent burial.

Naturally the affair created a great amount of discussion and investigation. In September, 1874, one John D. Lee, noted character who for years ran a ferry across the Colorado River at what is today known as Lee Ferry, in northern Arizona close up to the Utah line, was tried by a federal court as being the leading spirit in the matter.

It was fairly well established at the trial that the charge against the Indians was a mere blind and that the attack was a "cover" to secure the live stock, wagons, and other material owned by the emigrants.

Conviction and Execution

Lee was given two separate trials. The first jury was divided in its verdict, but he was convicted by the second. Judge Howard of the United States Court selected the place of the execution. Lee himself asked that he be shot to death, pleading only that the rifle fire be so directed as not to mutilate his body or face. He fell dead at the first volley as he sat on one end of his coffin beside the open grave. The shooting was done by a detail of United States troops which entered a canvas-covered army wagon during the night and was driven to the site still inside the wagon. With this canvas cover closely drawn, the soldiers fired from the inside of the wagon at very close range. The only opening in the canvas was the comparatively small one at the rear end which was left open for this purpose. Nobody

was allowed to stand at the execution where he could see into the wagon and ascertain the identity of the executioners.

While a soldier at Fort Apache, Arizona, in 1880, a sergeant of the Sixth U. S. Cavalry told me he was one of the firing squad inside the wagon cover detailed to the execution. He said—and he had documentary evidence to prove his statement—that seven men were inside the wagon and were driven to the site of the execution before daylight. The wagon was backed up, with its rear end and the opening facing the grave and coffin not more than twenty-five feet from it. Each man was then handed a rifle. The officers in charge told the men that at least one of the guns was not loaded, and they were ordered on pain of court-martial not to investigate their weapons in an effort to discover who had the loaded or who the unloaded rifles. This was done, of course, to protect the men from any possible effort on the part of Lee's friends to wreak vengeance on his executioners. After the execution the wagon was driven back to the military post and into an empty building where, under cover, the men could leave it and not be seen or recognized by their comrades.

The sergeant told me that each man in the party felt certain he held a loaded rifle. None of them felt he had one of the unloaded ones. They based their idea on the recoil of the weapon they held. But he assured me that none of them really knew for certain who it was that fired the fatal shot.

Lee's body was finally buried in the little cemetery at Panguitch, Utah, where it still lies.

Monument

In 1932 the Utah Pioneer Trails and Landmarks Association did considerable work at the scene of the massacre and placed a handsome bronze plaque on the rock wall surrounding the pit where nearly all the emigrants' bodies are still lying.

The following is the wording of this plaque:

ERECTED 1932
MOUNTAIN MEADOWS
A FAVORITE RECRUITING PLACE ON
THE OLD SPANISH TRAIL

IN THIS VICINITY, SEPTEMBER 7-11, 1857 OCCURRED ONE OF THE MOST LAMENTABLE TRAGEDIES IN THE ANNALS OF THE WEST. A COMPANY OF ABOUT 140 ARKANSAS AND MISSOURI EMIGRANTS LED BY CAPTAIN CHARLES FANCHER, ENROUTE TO CALIFORNIA, WAS ATTACKED BY WHITE MEN AND INDIANS. ALL BUT 17, BEING SMALL CHILDREN, WERE KILLED. JOHN D. LEE, WHO CONFESSED PARTICIPATION AS LEADER, WAS LEGALLY EXECUTED HERE MARCH 23, 1877. MOST OF THE EMIGRANTS WERE BURIED IN THEIR OWN DEFENSE PIT.

THIS MONUMENT WAS REVERENTLY DEDICATED ON SEPTEMBER 10, 1932 BY THE UTAH PIONEER TRAILS AND LANDMARKS ASSOCIATION AND THE PEOPLE OF SOUTHERN UTAH.



THE TRAGIC TOMB

How European Farms Are Run

AGRICULTURAL POWER AND EQUIPMENT now in use in European countries present many interesting contrasts between the new and old, although rapid progress has been made since the World War. R. P. Gray, of the Department of Agriculture, recently returned from an inspection trip abroad, told members of the American Society of Agricultural Engineers at a recent meeting in Chicago.

"It is true," Gray declared, "that in some countries small grain still is cut with hand sickles, but combines, both large and small, also are at work. Oxen still pull plows of wood, and others, metal shod, but rubber-tired tractors pulling steel plows are in common use." European farmers are getting away from the cumbersome pre-war tractors and are using the small machine built along automobile lines, it was stated.

The American plow, although used considerably, is not in general favor in Europe, Gray said. This is partly because the European farmer wishes to throw all furrows one way, which requires a reversible plow. He also wants narrower and deeper furrows.

In Germany, it was pointed out, considerable study has been given to soil conditions and it has been found that crop yields can be increased if the porosity of the soil can be increased. Scientists there are experimenting with the use of electric current in decreasing the draft of the plow.

Another European innovation described by the speaker is a hay-drier used in Sweden and England. Such equipment does away with the problem of curing hay in a wet climate.

Methods of cutting hay vary considerably throughout the continent, Gray said. In some German localities a common method is to use a scythe and in summer cut only enough each day for live-stock requirements. Some mowers are used, however. In England, American methods have been copied to a large extent. Mowers, buck-rakes, and stackers are in use. Frequently a second-hand car has a push-rake mounted in front, which makes a good outfit.

Most European farmers use commercial fertilizers, distributed with drills and special spreaders, although many of the crops are planted by hand. So far, little has been done about placing the fertilizer for most effective results. Manure is hoarded on most farms in the old country where it is hauled to the fields, dumped in piles, and spread by hand. Several American-type manure spreaders are in use.

Gray observed that farms in the old country are conspicuously free of broken-down and worn-out machinery. Either the machines are traded in on new machinery before they fall to pieces, he said, or they are sold as junk when they wear out.

Rodents on Ranges and Pastures

BY W. E. RITER

District Agent, United States Biological Survey, Colorado



A PILE OF POISONED PRAIRIE DOGS

AS A GENERAL THING THE amount of damage inflicted by field rodents to range and pasture lands by their destruction of range forage is not commonly appreciated, except by students of range and pasture management. Destruction and consumption of range forage resources by rodents not only rob domestic live stock and game of food that rightfully should be utilized by the latter animals, but such destruction further accelerates the process of denuding vast areas of plant cover and thus assists the forces of soil erosion in carrying on their devastating role.

There are instances where control of heavy rodent infestation has increased carrying capacity of ranges from 50 to 75 per cent. In other areas rodent infestation has been so contributory to range destruction as to reduce the carrying capacity to practically nothing.

Without attempting an exhaustive treatise on the subject, we shall consider some of the important roles that a few of the most common rodents play in range "de-vegetation," citing a few observations and some experimental data.

A perusal of the evidence as brought out in the experiments that will be cited should convincingly establish in one's mind the great importance of rodent-control measures on areas where heavy rodent infestations are resulting in heavy annual forage losses and in addition assisting the forces of soil deterioration and watershed destruction.

Ground Squirrels

There are numerous species of ground squirrels abounding on the grazing land of the western states, some being more destructive on given areas than others. Some species of ground squirrels are great seed lovers, and these exact a heavy toll in their annual harvest of grass seed which they either consume at once or carry away to their under-

ground caches to be eaten later. They not only thus hamper nature in her efforts to reproduce her grass species but during the growing season these animals destroy great quantities of plants that would ordinarily go to make up food for other more beneficial animals.

Grinnell and Dixon¹, in their studies of the California ground squirrel, found this animal, on open lands, to be feeding to a very great extent on alfalfa, fox-tail, and bur clover. Alfalfa is eaten from the time it appears aboveground until it ripens, and even after that, when the seeds have scattered out they are gathered and either eaten at once or stored. These authors through careful observation found the average daily diet of the average-sized ground squirrel to be about one-fourth pound of green alfalfa. Alfalfa is one of the most important and valuable of range plants.

In studies of the Oregon ground squirrel, careful measurements in one area revealed approximately 70,000 ground squirrels on a square mile of range land. Careful checks of stomach weights of these animals showed that each squirrel ate about 30 grams of green forage per day. The 70,000 squirrels on a square mile of pasture, therefore, would devour 2,100,000 grams, or somewhat more than two tons of green forage per day.

Grinnell and Dixon granted that a grazing steer eats 50 pounds of pasture forage each day and concluded that the squirrels on a square mile of pasture appropriate each day the forage which might support 90 head of cattle; or expressing it in other ways, 750 Oregon ground squirrels during the growing season of pasture grass eat as much as one steer, or the squirrels on every 7 acres thickly inhabited by them eat as much as one steer.

A 120-pound ewe will eat approxi-

mately 8 pounds of green forage per day. Using the above figures, one may conclude that the squirrels on a section of grazing land will appropriate the forage that would maintain 563 head of sheep; or 125 ground squirrels would eat as much forage as one 120-pound sheep.

Prairie Dogs

Prairie dogs abound over vast areas of our grazing and cultivated lands in the West, and the forage toll exacted annually by these animals is enormous.

Taylor and Loftfield² conducted rather extensive experiments in Arizona to determine the effect of Zuni prairie dogs on range grasses. These experiments involved very carefully checked quadrat plots in typical tall-grass type, the short-grass type, and the zone of transition between the Great Plains and desert associations of the grass land climax. The grasses in these areas were made up principally of wheat grass (*Agropyron*), porcupine grass (*Stipa spartea*), blue grama (*Bouteloua*), ring grass (*Muhlen*), black grama, and sand dropseed (*Sporobolus*).

The authors describe the manner in which grasses in the rodent- and cattle-grazed plots were destroyed or damaged and how reproduction of the grass species was difficult and, in some instances, impossible. The summary of their observations is quoted herewith:

"Results of four years' experiments at Coconino show that prairie dogs destroy 69 per cent of the wheat grasses and 99 per cent of the dropseed, or 80 per cent of the total potential annual production of forage.

"Results of one year's experiments at Williams show that the rodents destroy 83 per cent of the blue-grama crop, the most important forage grass of the region. Such extreme destruction favors the growth of unpalatable weeds, makes range recovery difficult, and opens the way for soil deterioration through erosion.

"Prairie dogs and cattle come into direct and, in times of drought, deadly competition. The evidence from these experiments indicates that these rodents do not eat anything that cattle do not, and that the two eat the grasses in the same order of preference.

"The impressive total of forage that may be destroyed by prairie dogs clearly indicates the constant losses suffered almost unconsciously by stockmen who utilize the open range in places where the rodents have not been eliminated. The possible destruction of 80 per cent of the forage, or even of a smaller proportion, is serious enough at any time, but in periods of drought it is likely to be calamitous, especially in normal years if the range is stocked to capacity."

Kelso³ ran stomach analyses on 544 prairie dogs and found that 97 per cent of the animals' feed is made up of vegetation. Forage and crop plants made

up 78 per cent of the diet, and vegetation of little or no economic value made up only 19 per cent of the diet.

Jack Rabbits

Though jack rabbits are not true rodents, they belong to a closely related order, and because of their destructive habits to range vegetation they will be considered here.

Numerous observations under varying conditions have indicated the important role played by jack rabbits and the contribution they have made in changing a grass-type range to a desert type area.

Vorhies and Taylor³ conducted feeding tests on jack rabbits in Arizona and also made quadrat studies on the Santa Rita range in the state in order to determine the amounts of forage consumed by these animals, together with the effect of their foraging upon the character of change in the range vegetation.

In their feeding experiments (using green alfalfa and grama grass) these authors found that 11.8 rabbits would consume as much feed as a 120-pound sheep, and 58.8 rabbits would consume as much feed as a 750-pound cow. This was based on their assumption that a 120-pound ewe will consume 8 pounds of green feed in a day, and a 750-pound cow will consume 40 pounds of green roughage in a day. Therefore, roughly speaking, from a forage consumption standpoint, we can state: 12 rabbits=1 sheep, 59 rabbits=1 cow.

On range quadrats containing grama grasses, three-awn timothy, and weeds it was determined that rabbits destroyed 28.7 per cent of the total vegetation. In determining the percentage of the valuable forage grasses destroyed, it was found that the animals consumed or destroyed 38.8 per cent of the valuable forage grasses, these being mainly the two species of grama grass.

Stomach analyses indicate that 36 per cent of the food of the antelope jack rabbit is mesquite (browse) and 45 per cent grasses.

In the experimental plots on the Santa Rita range, jack rabbits and rodents are mainly responsible for holding

the vegetation in a preclimax condition, preventing attainment of the climax grass stage.

"The evident fondness of rabbits for grass when available probably favors the encroachment on grass ranges of mesquite, cholla, weeds, and other species."

Jack rabbit effects on vegetation in dry seasons are especially harmful and are likely to produce far-reaching adverse results on vegetation.

A very important observation brings out the fact that grasses that are palatable to cattle are also palatable to rabbits, and both exhibit the same order of preference for grasses. This means that rabbits enter into direct competition with cattle on the range.

Pocket Gophers

Pocket gopher damage to range lands varies exceedingly throughout the western area, depending upon the severity of the infestation and the slope or contour of the land surfaces.

In many areas heavy pocket gopher infestation on sloping range lands has so undermined the soil with vast systems of burrows that serious soil erosion has resulted; for the water finds a rapid passage-way when it reaches these gopher channels, and in a short time what was once a seemingly harmless system of gopher runways becomes a system of furrows and, later, deep gullies.

Further, the pocket gopher clips off the roots of valuable forage plants in order to secure for himself the necessary food for his existence. This results in destruction of the plant cover over his feeding area, many of these plant species having contributed to the food supply of beneficial grazing animals.

The pocket gopher must get rid of the dirt in the process of his so-called "mining operations." This he does by bringing it to the surface and depositing it in dumps. These dumps, in areas of heavy gopher infestation, cover in the aggregate an enormous surface, resulting in covering up and killing out the vegetation previously occupying these areas.

"From 1,200 to 1,500 distinct earth heaps to the acre have actually been

counted on fields of average infestation."⁴

These mounds average from 1½ feet to 2 feet in diameter at the bottom. One may, therefore, easily calculate the total surface of smothered vegetation that occurs on a given area where an ordinary pocket gopher infestation exists. In some areas of heavy infestation only a small percentage of the total land area remains uncovered after dumpings of runway debris.

¹Joseph Grinnell and Joseph Dixon, "California Ground Squirrels." *Monthly Bul. Cal. State Com. of Hort.*, November-December, 1918.

²Walter P. Taylor and J. V. G. Loftfield, "Damage to Range Grasses by the Zuni Prairie Dog." *U. S. D. A. Dept. Bul. No. 1227*.

³Charles T. Vorhies and Walter P. Taylor, "The Life Histories and Ecology of Jack Rabbits in Relation to Grazing in Arizona." *Univ. of Ariz. Tech. Bul. No. 49*.

⁴T. H. Scheffer, "Habits and Economic Status of the Pocket Gopher." *U. S. D. A. Tech. Bul. No. 224*.

⁵Leon H. Kelso, *Food Habits of Prairie Dogs*.

Cost of Grasshopper Damage

DESTRUCTION BY GRASSHOPPERS IN A ten-year period cost the country an estimated \$250,000,000, says the *Omaha Daily Journal-Stockman*.

Estimates of the ten-year losses in the infested states are: Arizona, \$346,130; California, \$422,200; Colorado, \$39,500,000; Idaho, \$7,557,000; Indiana, \$200,000; Illinois, \$625,000; Iowa, \$8,150,000; Kansas, \$10,000,000; Michigan, \$4,150,000; Minnesota, \$9,350,000; Missouri, \$15,000,000; Montana, \$17,070,000; Nebraska, \$19,593,000; New Mexico, \$10,020,000; Nevada, \$234,700; North Dakota, \$51,158,000; Oregon, \$4,900,000; Oklahoma, \$3,600,000; South Dakota, \$28,850,000; Texas, \$10,000,000; Utah, \$3,400,000; Wisconsin, \$3,550,000; Wyoming, \$2,300,000.

This year the grasshopper menace is three times as great as ever before in history, declared Dr. J. R. Parker, of the Department of Entomology, at a recent meeting of an international group of entomologists. He estimated that more than 91,000 tons of poison bran will be necessary in order to destroy eggs lying in the soil of twenty-two states from California to Michigan, from the Canadian border to Oklahoma.



PRAIRIE DOGS LEFT THIS AREA ALONE



BUT NEAR-BY THEY MADE THEIR INVASION

A Letter to the President

THE FOLLOWING LETTER TO THE President, written by F. E. Mollin, secretary of the American National Live Stock Association, deals with the Argentine sanitary convention:

"DENVER, COLO., December 12, 1936.
"Honorable Franklin D. Roosevelt,
"The White House,
"Washington, D. C.

"DEAR MR. PRESIDENT:

"We have before us excerpts of your speech at the luncheon in Buenos Aires honoring President Justo and as reported in this country by the *Associated Press* in dispatch dated December 2. I quote the three following short paragraphs as they are given in the dispatch:

"But it is equally clear that quarantine or sanitary regulations should neither be used as disguised tariff measures nor should they be overapplied except in accordance with strict justice.

"About a year ago, the Argentine government and the government of the United States negotiated a sanitary convention which had for its purpose the removal of an inequitable situation which had arisen as a result of the all-embracing character of legislation adopted by the Congress of the United States.

"The ratification of this convention would make it possible for Patagonia, a sheep-raising area where the hoof-and-mouth disease has not existed, and which territory is separated by natural barriers from the cattle-raising region of the republic, to be relieved from the sanitary embargoes now placed upon it."

"The arguments advanced in the above paragraphs are those which have been used for years by Argentine officials and by the diplomats of our own Department of State in an effort to break down the embargo which has been in effect since January 1, 1927, and which has done a remarkable job of protecting the health of the herds and flocks in this country. It is unfair to the live-stock industry to assume that this embargo is used as a disguised tariff measure and that an inequitable situation has arisen as a result thereof. It is more than unfair to intimate that the only effect of the ratification of the Argentine sanitary convention would be imports of lamb and mutton from Patagonia. There is not a word about Patagonia in the Argentine sanitary convention. It would permit imports of both dressed beef and dressed lamb or mutton from any territory or zone in the Argentine which was temporarily declared to be free of foot-and-mouth disease, although right next door might lie heavily infected areas.

"I am sure you did not know when you made the speech referred to that foot-and-mouth disease now exists in the following countries in the world and that under the terms of existing law no imports of cattle or sheep or dressed beef,

lamb, or mutton can be accepted therefrom:

"Albania, Algeria, Arabia, Argentina, Austria, Bechuanaland, Belgian Congo, Belgium, Bolivia, Brazil, Bulgaria, Chile, China, Chosen (Korea), Czechoslovakia, Danzig (Free City), Denmark, Ecuador, Egypt, Ethiopia (Abyssinia), Federated Malay States, France, French West Africa, Great Britain, Germany, Greece, India, Indo-China, Iran (Persia), Iraq, Italy, Luxembourg, Morocco, Netherlands, Palestine, Paraguay, Peru, Philippine Islands, Portugal, Rhodesia, Rumania, Siam, Spain, Straits Settlements, Sudan, Sweden, Syria, Tunisia, Turkey, Union of Soviet Socialist Republics (Russia), Uruguay, Yugoslavia; the Colonies or Territories of Eritrea, Gambia, Gold Coast, Kenya, Nigeria, British Somaliland, Italian Somaliland, Tanganyika, and Uganda in Africa; Ceylon, the islands of the Malay Archipelago, and the various islands of the Mediterranean.

"It would be far easier to list the few countries in the world which do not have foot-and-mouth disease and which, therefore, have every right to maintain embargoes against shipments from disease-infected countries. Only the strict maintenance of such embargoes has prevented them from being added to the list.

"May I call your particular attention to the condition existing in Great Britain. This country, as you know, is a deficit meat-producing country. Therefore, in order to replenish its own inadequate supply, it must accept imports from low-cost surplus-producing meat countries. BAI Order 353, effective August 1, 1935, lists Great Britain as one of the countries whose herds are infected with foot-and-mouth disease and from which, therefore, no imports can be accepted. In amendment No. 1 to that order, effective September 20, 1935, Great Britain is stricken from the list because it had apparently cleaned up the last current outbreak of foot-and-mouth disease. In amendment No. 2 to BAI Order 353, effective September 24, 1935 (four days later than amendment No. 1), Great Britain is again restored to the list of countries referred to, because it had again been found that foot-and-mouth disease existed there. In amendment No. 3 to BAI Order 353, effective April 28, 1936, Great Britain is again stricken from the list, because it had again apparently cleaned up the disease. In amendment No. 5 to BAI Order 353, effective October 17, 1936, Great Britain is again restored to the list of countries referred to, because of a new outbreak of the disease. Information which has just been received in this office direct from London lists eighteen outbreaks: four in Oxfordshire between the eleventh and the eighteenth of October, 1936; nine in Flintshire and Cheshire between the fifteenth and thirtieth of October, 1936; two in Hampshire, October 27 and

29, 1936; one in Cornwall, October 29, 1936; and two in Suffolk, November 2 and 8, 1936. Great Britain, due to the necessity of importing meat, is paying a costly price. It is an entirely established fact that the germ can be carried in the marrow of the bone of frozen or chilled beef for many weeks. Surely you would not want the United States, with its millions of cattle and millions of sheep, to run the risks that are so clearly evidenced, because we do not need to pay that price. Our own meat supply is entirely adequate to the needs of our people.

"In the years 1924 and 1925, there were various outbreaks of foot-and-mouth disease in Texas and California. It was an established fact that all these outbreaks, as well as previous outbreaks, were due to infections brought into this country either from South America or from ships in the Oriental trade. To meet the situation, the Bureau of Animal Industry voluntarily established on January 1, 1927, a strict embargo which prohibited imports of meat products from any region in which foot-and-mouth disease existed. While this language was less mandatory than the present law, which went into effect June 17, 1930, the Bureau of Animal Industry, despite all pressure from diplomatic channels, maintained the embargo rigidly against all countries where foot-and-mouth disease existed, and after June 17, 1930, such rigid embargo was made mandatory. As a result of this precaution, there has been only one slight outbreak of foot-and-mouth disease in this country in that ten-year period, and that, among garbage-fed hogs in California, was traced to garbage coming from ships engaged in the South American trade and brought ashore in violation of existing BAI regulations. The live-stock industry wishes to state emphatically that it is fighting the ratification of the Argentine sanitary convention solely on its merits as a sanitary measure. We do not trust natural barriers to prevent the spread of the disease. We call your attention to the fact that the 1914 outbreak in this country spread to twenty-two states and the District of Columbia, jumping many natural barriers, and was conquered only with the greatest difficulty and at tremendous expense. We know that the disease is highly infectious and easily transmitted. We know that the germ has lain dormant on farms and ranches in California and Texas from 283 days to 345 days after the last infected animal had been slaughtered and buried in quicklime and that there were then new outbreaks on these same places which could be traced to no outside source. That makes it possible ostensibly to clean up the disease in given areas and yet to have infected animals appear therein many months later.

"We call your attention to the fact that the 1924 outbreak in California

spread to the deer running on the Niagara Range of the Stanislaus National Forest and that a total of 22,214 deer were killed to prevent further spread of the disease.

"I urge you to follow the recommendation of the United States Live Stock Sanitary Association, which comprises the leading veterinary officials of the entire nation, which met at the Hotel LaSalle in Chicago last week and adopted the following resolution:

"Resolved, That this association go on record as vigorously opposing any modification of the existing federal laws governing the movement of live stock or live-stock products from any foreign country harboring foot-and-mouth disease or any other transmissible disease of live stock which does not now exist in the United States."

"These are the men who have fought and conquered the previous outbreaks in this country. They know better than any diplomat in the State Department the cost of such outbreaks and the urgent necessity of maintaining the present embargo.

"Respectfully yours,

"F. E. MOLLIN,

"Secretary."

Taylor Act Fees Opposed

RESOLUTIONS OPPOSING THE COLLECTION of grazing fees under the Taylor Grazing Act and the method of setting the fees were adopted by the Nevada State Cattle Association at its second annual convention, held at Winnemucca, Nevada, on November 5.

Other resolutions adopted called for—

Opposition to government processing taxes on beef;

Opposition to passage of legislation interfering with sale of live stock at point of origin or at any point en route to market;

Opposition to adoption of Argentine sanitary pact;

Closer watch by local officials of traffic in live stock;

Endorsement of activities of American National Live Stock Association (of which Nevada association is a member) and support of constructive and protective activities pertinent to industry;

Further protection against importation of canned meats.

The Meat Board, Institute of American Meat Packers, national chain store organization, and National Association of Retail Meat Dealers were given a vote of thanks for their co-operation in August Beef Month Campaign.

A committee headed by Harry Cazier, of Wells, was appointed to work out proper rules for an adequate brand inspection system.

President William B. Wright, of Deeth, was again chosen to lead the association. The other officers re-elected were: George W. Garat, of Tuscarora, first vice-president and chairman of the

executive committee; Archie Dewar, of Lee, second vice-president; George Russell, Jr., of Elko, treasurer; and Jacqueline Tapscott, secretary.

The 1937 convention will be held in Elko next November.

New Mexico Board Meets

STRONG OBJECTION TO RATIFICATION OF the Argentine sanitary convention was voiced by the executive board of the New Mexico Cattle Growers' Association at its quarterly meeting in Santa Fe on November 15.

Pointing out that our present law of strict exclusion keeps us free from foot-and-mouth disease, the board resolved "That the association ask our next legislature to petition Congress through a joint resolution to oppose the ratification of the proposed Argentine sanitary compact and demand the retention of the present embargo against importations of live stock or its products from countries where either rinderpest or foot-and-mouth disease exists."

In its report on the meeting, the association's "Quarterly Bulletin" pointed out that in the matter of reciprocal treaties representatives of the industry should continue to make their objections to the President and the Secretary of State. Demand for the passage of the Kleberg oleomargarine bill was also made.

Among the speakers before the board were Albert K. Mitchell, of Albert, New Mexico, president of the American National Live Stock Association; State Land Commissioner Worden; T. A. Spencer, of Carrizozo; and W. A. Losey, of Hagerman.

Woolmen Adopt Resolutions

FRANK C. CLARKE, OF LAYTONVILLE, California, will head the California Wool Growers' Association during the coming year. He was elected president of the organization at its seventy-sixth annual convention held in San Francisco on November 19-20. He succeeds S. P. Arbois, of Stockton. The new vice-president is L. A. Manor, of Williams. W. P. Wing, of San Francisco, remains as secretary-treasurer.

Resolutions adopted by the convention included the following (summarized):

Opposing such organization of farm labor as would place farmer in position of subordination to "preferential hiring;"

Commending live-stock lending agencies, but calling attention to "known truth that too much credit can be just as harmful as too little;"

Calling upon Forest Service and University of California to investigate mooted Forest Service fire-prevention policies to end that factual basis for future policy may be established;

Requesting definite policy concerning issuance of permits under Taylor Graz-

ing Act, and instructing association officers to co-operate with representatives of other states in seeking certain amendments to act;

Recommending that determination of fees under act be left to states if not to districts, and objecting to collection of 1937 fee until Nevada's challenge of legality of 1936 fee is settled;

Asking establishment of experimental range in Sacramento Valley for "study of sheep in relation to grazing lands;"

Favoring resolution asking Soil Conservation Service to make reseeding of burned-over ground a soil-building practice in 1936 and 1937 government program;

Asking repeal of Reciprocal Trade Agreements Law, or, as alternative, that (1) treaties be submitted to producers affected, (2) treaties be approved by Senate, (3) rates granted apply only to treaty-making nation, and (4) no pact reduce existing live-stock or agricultural tariff;

Opposing ratification of Argentine sanitary convention;

Opposing legislation tending to restrict number of live-stock marketing channels;

Commending work of National Live Stock and Meat Board;

Sanctioning legislation for grading and branding lamb and mutton, and approving stand of California Cattle-men's Association favoring federal beef grading and stamping;

Opposing repeal of state sales tax;

Advocating enactment into law of principle involved in Pettengill bill;

Suggesting legislation requiring trucks hauling sheep to have bill of lading;

Requesting additional appropriation for predatory-animal control work, and urging carrying out of federal ten-year control program;

Asking that county boards of supervisors adopt protective ordinances against dogs;

Urging legislation to provide for labeling by manufacturers to show other-than-wool content in manufactures, and requesting law that foreign-made apparel show country of origin.

California Locals in Meeting

THE REGULAR FALL MEETING OF THE Santa Barbara Branch of the California Cattlemen's Association was held in Los Olivos, California, on November 7. Speakers included William A. Freeman, of Santa Paula, president of the California Cattlemen's Association; John Curry, of San Francisco, secretary of that organization; and Clyde Harris, of Salinas.

The Santa Barbara organization, a member of the American National Live Stock Association, recently adopted the "calf plan" method of payment of dues to the National. Gratifying returns have come from the plan.

Theodore Chamberlin, Jr., of Los Oli-

vos, is president of the association, and Walter Buell, of Buellton, secretary.

* * *

The annual meeting of the Calaveras Cattlemen's Association was held in San Andreas, California, on November 10. Officers of the association are C. J. Tiscornia, president, and John Huberty, secretary, both of Calaveras County.

Oregon County Group Meets

THE GRANT COUNTY STOCK GROWERS' Association held its thirteenth annual meeting in Canyon City, Oregon, on November 21. Wayne Stewart, of Dayville, was re-elected president. Joe Officer, of Izee, was chosen vice-president; Ralph Brooke, of Canyon City, and C. A. Trowbridge, of John Day, secretary and treasurer, respectively.

A summary of the resolutions adopted follows:

Asking protection against game trespass on private lands, and that some measure of compensation for forage use be given;

Recommending more complete disposal of waste from logging operations in order that damage to grazing lands may be prevented;

Favoring control by Forest Service of undergrowth and fallen timber, so that land so covered may be restored to grazing;

Objecting to enlargement of national forest area in Grant County, and asking that lands acquired by Forest Service outside national forests be resold to citizens;

Requesting appropriation for Grant County trappers;

Favoring federal control in settling controversy between labor unions and employers;

Favoring apportionment of part of gasoline tax income for use on county roads; and

Favoring uniform federal bounty on predators.

Dairy Farmers Adopt Policies

THE NATIONAL CO-OPERATIVE MILK Producers' Federation, meeting recently in St. Paul, Minnesota, registered protest against "the present policy whereby our markets are being flooded with dairy products from foreign nations which have taken little or no action whatever to control the spread of disease among dairy cattle."

Request was made for additional federal taxes on all foreign fats and oils. Repeal of the production-control and processing-tax sections of the Agricultural Adjustment Act and re-enactment of the present milk marketing agreement were asked.

Other resolutions favored development of co-operative associations, establishment of a sound monetary system,

adoption of the Brandt plan of surplus crop control based on the equalization fee principle, and maintenance of farm credit system "as a separate agency of the government to finance, by co-operative means, the permanent needs of agriculture."

It was declared that operation of the Reciprocal Trade Agreements Act has to date been harmful to dairy farmers, and further tariff concessions on dairy products were opposed.

Enactment of additional federal tax laws to protect producers against foreign fats and oils was urged. On oleomargarine made in the United States, enactment of an additional federal tax of at least five cents a pound and additional state taxes was favored.

Oils-and-Fats Tax Favored

EFFORTS TO AMEND EXISTING TAX PROVISIONS affecting foreign fats and oils "in any way not in accord with the interest of domestic producers" were opposed in a resolution adopted by the Association of Southern Commissioners of Agriculture at a meeting held in Nashville, Tennessee, on November 18.

The resolution pointed to the large increases in imports of oils and fats over a period of twenty years. Copra had increased during the 1913-35 period from 34,500,000 pounds to 635,000,000 pounds; coconut oil, from 50,500,000 pounds to 363,333,000 pounds; palm and palm-kernel oil and nuts and kernels, from 73,750,000 pounds to 264,000,000 pounds; sesame oil, from a very small quantity to 146,000,000 pounds; perilla oil, practically unknown in 1925, to over 42,000,000 pounds; rape-seed oil and seeds, from 16,000,000 pounds in pre-war days to 65,000,000 pounds; and sunflower oil, from nothing to 43,000,000 pounds.

While the principle of a domestic excise import tax on oils and fats was supported, the resolution suggested that such tax be at a level which would permit domestic producers to market their complete output in the domestic markets "at prices which will cover fair domestic cost of production without shutting out an imported supply to supplement any domestic shortage or supply special technical necessities."

Opposition to legislation restricting the sale of any American product made wholly from American-grown fats and oils was also voiced.

Grange Adopts Platform

A PROGRAM FOR AMERICAN AGRICULTURE as outlined at the 70th annual session of the National Grange, held at Columbus, Ohio, on November 11-19, included the following:

A farmer-controlled soil conservation program; a system of voluntary federal crop insurance; extension of rural elec-

trification; maintenance of co-operative rural credit system with return of majority control in land bank boards and farmers; a dollar constant in its purchasing and debt-paying value; repeal of "favored nation" clause in tariff agreements; opposition to "repeal of present legislation which protects farmers against high freight rates at interior points;" and taxation of all incomes and balancing of budget at earliest possible date.

The Grange favored, among other things—

Support of farmer-owned and controlled buying and selling co-operatives; a rehabilitation program to aid tenant-farmers and share-croppers; grouping of agricultural bureaus and other federal agencies within Department of Agriculture; encouragement of growing such non-surplus crops as flax, sugar, etc.; continued activity in eradication of bovine tuberculosis and other diseases in live stock; weed control; conservation of forests and wild life; further investigation of high prices of farm machinery; enforcement of oleomargarine law; congressional investigation of practices of large meat packers; and further efforts for enactment of truth-in-fabrics law.

In the "against" column were included—

Bringing new lands into cultivation until needed; admission of dairy products which fail to comply with established requirements; private contributions to county extension service; admission of Hawaii to statehood; "certain chain store practices—large-scale farming, 'loss leaders' of farm products, and other methods which prove injurious to agriculture;" land ownership by aliens ineligible to citizenship.

Farm-Operating Periods

ONE OUT OF EVERY SIX FARM OPERATORS in the country on January 1, 1935, had operated his farm less than a year. Of 98 per cent of the total farm operators, 18 per cent had been operating their farms less than a year, 26 per cent less than two years, 44 per cent less than five years, 60 per cent less than ten years, and 72 per cent less than fifteen years. Those operating fifteen years or more comprised 28 per cent of the total.

Farm owners occupy their farms for much longer periods than do tenants, 15 per cent of all owners operating ten to fourteen years and 44 per cent fifteen years or more, while of all tenants only 7 per cent operated the same farm ten to fourteen years and 7 per cent fifteen years or more. For the South as a whole the farm census shows that 44 per cent of the tenants have been occupying the farms operated less than a year and 13 per cent additional less than two years.

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WELCOME, SEÑORS! TO EL PASO!



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CONVENTION**
of the
**American
National
Livestock
Association**
Jan. 12, 13 and
14, 1937

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Tender Meat from Tough Cow

JUST A LITTLE DROP OF THIS, AND presto! 'tis a tender, tasty steak. The process is explained in the following article, "Utopian Morsel," reprinted from the *Industrial Bulletin* of Arthur D. Little, Incorporated, Cambridge, Massachusetts:

"The succulent tender steaks of the skilled chef may soon become commonplace home fare, lacking only the overture of the grimacing waiter and the finale of the overgrown check. Methods of tenderizing tough meat are being investigated and eventual success seems indicated by results already obtained.

"The tenderness of the smart restaurant's excellent beef has been obtained by hanging, by the natural ageing of incipient decay. Patrons would probably refuse such meat if it were delivered by the butcher on demand for specially fine steak for a holiday dinner. Its appearance uncooked is not necessarily appetizing, yet the hanging of beef and game is as old as the art of the master chef. It is perhaps unfortunate that the procedure is not readily adaptable to modern retail distribution and use.

"The natives of certain tropical areas where high temperatures make such hanging or storage impossible are known to use other tenderizing methods. They wrap freshly killed jungle game in the leaves of the papaya plant for a few hours before cooking. The papaya contains fluids that soften or digest the proteins of the meat—in brief, proteolytic enzymes—and so their enzyme-treated meat is tender when cooked. It is materials of the same type as these papaya enzymes that are being considered in certain modern food laboratories; pepsin and trypsin, for example, have much the same action, although both affect taste adversely. Enzymes are natural products and certain of them are distributed by pharmacists as aids to digestion.

"A recent patent covers the treatment of beef and other meat at the stock yards, by forcing the tenderizing fluid into the vascular system of the freshly killed stock. It is indicated that the toughest old range steer can thus be made tender. The best beef draws a premium as much for its tenderness as for its flavor; recent government blind-fold tests have even revealed difficulty in distinguishing between beef, lamb, and pork. Nice questions are thus raised for food inspection authorities, who will realize that many interests may be affected by any endeavor to market tenderized low-priced meat. McGraw-Hill's *Food Industries* notes a new food softener from Japan. The bottled powder, said to be made from a proteolytic enzyme, softens albuminous food within a few minutes without changing flavor or color. One packing company ages beef in a third the time ordinarily required, at the same time eliminating

the customary spoilage loss. This is accomplished merely by appreciably raising the temperature and humidity of the ageing room, and preventing the otherwise heavy surface deterioration by irradiating the meat's surface with a fungicidal ultra-violet lamp offered by Westinghouse for this purpose.

"Already one product said to be an extract of papaya is being offered for sale to restaurants and hotels as producing tender steaks from cheap cuts at a cost of a cent or two. The liquid is painted on the meat five or ten minutes before cooking, and it is reported that the treated steak may be cut with a fork. Whatever the merit or success of products or methods now available, there is every prospect that in due time even cheap meat will be tender."

Cattle on Feed

DEVELOPMENTS DURING NOVEMBER GAVE further indications of a sharp reduction in cattle feeding during winter and next spring, says the Division of Crop and Live Stock Estimates in its December 1 report on cattle on feed. It is reported that corn and other feeds advanced sharply during the month and that feeder cattle prices stood high in relation to fat-cattle prices. In the western states, where grain and hay prices are relatively low, it is possible that an increase in feeding will take place.

Stock and feeder cattle inspected at stock yards moved into Corn Belt states in volume 10 per cent smaller than in November last year. For the five months July to November, such shipments were 13 per cent fewer and the least for the period in eighteen years. The decrease was in shipments to the western Corn Belt. Shipments into the eastern Corn Belt were slightly greater than last year's and the largest in ten years. In both Corn Belt areas a larger than usual proportion of the shipped-in cattle will be carried through the winter on hay, fodder, and other roughage and pastured next summer and either sold as grass cattle next fall or fed out in the winter of 1937-38.

Indications are that in the West feeding will be heavier than last year. California and Arizona may feed a record number. Colorado is expected to feed more, offsetting the decrease in lamb feeding; Texas will feed fewer, it is reported.

Guzerat-Angus Crossbreeding

IN CROSSBREEDING EXPERIMENTS AT the Iberia Live Stock Experiment Farm, Jeanerette, Louisiana, in co-operation with the Louisiana Agricultural Experiment Station, in which Aberdeen-Angus cows have been bred to Guzerat bulls (one of the breeds of the humped cattle of India), the first generation of cross-

breeds have greater size and weight for age than purebreds. The polled characteristic is dominant in about 30 per cent of the first-cross heifers and in less than 5 per cent of the first-cross bulls. However, all the offspring from such heifers bred back to the Aberdeen-Angus bulls have so far been polled. The black color of the Angus appears to be dominant.

November 1 Crop Estimates

THE CROP REPORTING BOARD OF THE Department of Agriculture, in its general crop report as of November 1, 1936, indicates this year's crop yield per acre and total production as compared with 1935 (in bushels except as otherwise noted):

	Yield per Acre		Production	
	1936*	1935	1936*	1935
Corn, all.....	15.5	24.0	1,526,627	2,291,629
Wheat, all.....	12.3	12.1	627,233	623,444
Winter.....	13.7	13.9	519,097	464,203
All spring.....	8.2	8.8	108,136	159,241
Durum.....	5.3	10.1	7,962	22,957
Other spring.....	8.6	8.7	100,174	136,284
Oats.....	22.8	30.0	783,750	1,196,668
Barley.....	16.3	23.1	143,916	282,226
Rye.....	9.0	14.0	27,095	58,928
Buckwheat.....	16.2	16.6	6,456	8,220
Flaxseed.....	3.6	7.0	6,081	14,123
Rice.....	50.4	48.1	45,141	38,132
Grain sorghums†.....	7.4	10.5	58,103	97,823
Hay, all tame†.....	1.12	1.42	62,968	76,146
Hay, wild†.....	.62	.92	7,197	11,338
Hay, all clover and timothy††.....	.96	1.30	21,592	26,263
Hay, alfalfa.....	1.74	2.08	24,903	28,726

*For certain crops, figures are not based on current indication, but are carried forward from previous reports.

†Excludes sweetclover and lespedeza.

‡In tons.

Domestic cotton production was forecast on December 1 at 12,407,000 bales. This compares with a production of 10,638,000 bales in 1935. Average yield per acre is put at 197.6 pounds, compared with 186.3 in 1935.

The Calendar

Jan. 4-6—Convention of Montana Wool Growers' Ass'n, Billings, Mont.

Jan. 8-14—Ogden Live Stock Show, Ogden, Utah.

JAN. 12-14—CONVENTION OF AMERICAN NATIONAL LIVE STOCK ASS'N, EL PASO, TEX.

Jan. 16-23—National Western Stock Show, Denver, Colo.

Jan. 19-20—Convention of Utah Wool Growers' Ass'n, Salt Lake City

Jan. 20—National Western Hereford Sale, Denver, Colo.

Jan. 26-28—Convention of National Wool Growers' Ass'n, Albuquerque, N. M.

Mar. 6-9—San Angelo Fat Stock Show, San Angelo, Tex.

Mar. 12-21—Southwestern Exposition and Fat Stock Show, Ft. Worth, Tex.

Mar. 16-18—Convention of Texas and Southwest Cattle Raisers' Ass'n, Ft. Worth, Tex.

Mar. 26-27—Convention of New Mexico Cattle Growers' Ass'n, Raton, N. M.

May 19-20—Convention of Montana Stock Growers' Ass'n, Bozeman, Mont.

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Vol. XVIII DECEMBER, 1936 No. 7

EDITORIALS

The Argentine Pact

WITH A NEWLY ELECTED Congress soon to assume its official functions in Washington, with both Secretary Hull and President Roosevelt in South America, thus giving diplomats of that continent an unusual opportunity to press for favors in negotiations affecting trade with the United States, it is only natural that there should be a revival of interest in the Argentine sanitary convention, which for more than a year has been snugly reposing in a pigeonhole in the Senate Foreign Relations Committee's desk. It is already duly signed by the diplomatic representatives of the two countries and lacks only a two-thirds vote by the Senate to make it effective.

There is considerable want of understanding on the part of the public as to the effect ratification of this agreement would have. We are told that its only consequence would be the importation of relatively small quantities of dressed lamb and mutton from Patagonia. But there is not a word in the Argentine sanitary convention about Patagonia. As a matter of fact, the convention would open the gates to dressed-meat products from any region or zone in Argentina officially declared free of foot-and-mouth disease. It is entirely idle to believe that the tremendous pressure which is being applied by the diplomatic officials of Argentina—and unfortunately also by our own diplomatic officials—to secure the ratification of this agreement is concerned only with the importation of a few lamb or mutton carcasses. The plain purpose of the pact is to secure an outlet in the United

States for the surplus meat products of Argentina, both beef and mutton. The situation there has been made more acute because England has somewhat restricted the amount it is willing to accept of Argentine meat.

It is easy to understand why Argentine officials, accustomed as they are to frequent outbreaks of foot-and-mouth disease and making no serious effort to eradicate it, should easily persuade themselves that our country ought to be willing to gamble with the disease. It is pointed out that England accepts meat from Argentina, and therefore why should not the United States? The principal difference is that England is a deficit meat producing nation and must take chances, frequently having to pay dearly for foot-and-mouth outbreaks, while the United States is not a deficit meat producing country and does not have to take such chances.

The Argentine sanitary convention should be considered solely on its merits as a sanitary measure. Whenever Argentina adopts the slaughter method of control and can truly say that its herds are disease free, there will no longer be any point in maintaining the present embargo. When that time comes we shall officially determine before the proper committees in our Congress a fair and reasonable tariff on imports of meat. Until that time arrives, live-stock producers all over the country will stand firm in their demand that the present embargo continue in force unchanged.

The United States is one of the few major live-stock producing countries in the world which are not subject to the ravages of foot-and-mouth disease. Every official in our government should consider it his duty to help maintain that disease-free status. It is inconceivable that any senator from a live-stock producing state could do otherwise than vote "no" if the matter is reported by the Senate Foreign Relations Committee and duly presented to the Senate.

A Marketing Evil

WE HAVE HAD OUR ANTI-direct-marketing bill—the Capper measure—and have seen it fail; we have read reams about the disastrous effect of direct marketing, but have yet to be convinced; we have watched the profuse spending of time and money to paint the devil in direct buying, and to no avail. Hogs, and other animals for that matter, still tread the virtuous path that follows supply and demand, except when they stumble over the all too frequent violent price fluctuations. And concerning this evil, which is undoubtedly the greatest drawback of all in the central-marketing idea, we have had hardly a word.

Price declines often occur because of

relatively slight oversupplies on a market where there is no corresponding fall in the fresh-meat prices. And this, probably more than all other things, has contributed to the desire—showing up so markedly in the growth of auction sale rings, organization of county pools, and shipments direct to packer—to get away from a system under which prices can drop as much as \$1 to \$1.50 a hundred between the time a rancher, far from the railroad, orders his cars and the time his stock is actually sold on the market.

Here is a situation which needs remedying. All agencies involved—the shippers, the transportation systems, the commission agencies, the stock-yard companies, and the packers—have an interest in working out a better and more stable market situation. No one can object to declines that are in line with gradual trends; but short-term, violent fluctuations may spell the difference between profit and loss in a rancher's operation—if he should be so unfortunate as to get his entire year's output in on one of the bad days.

And unless this problem is solved, there will be a growing tendency in shippers to find a means of marketing their stock in a manner that leaves them in control until the price is determined. They will not be content with a system in which the anticipated earnings of a year's hard work may be wholly destroyed because there are a few cars too many on the market, or for some other reason. Under present conditions, central markets are largely buyers' markets, because the shipper has practically lost control of the shipment when the car door is shut at the shipping point. They must be made into markets where buyer and seller meet on an equal level if they are to survive as the principal method of marketing.

Mexico's Land Law

MEXICO, ACCORDING TO PRESS dispatches, is soon to have a new agrarian law that may mean the end of the American cattle industry in that country. Naturally the question arises, What effect will the measure have on United States cattle markets?

While estimates of the extent of American interests in the cattle business of Mexico are not at hand, it is believed most of the large ranches south of the Texas-Mexico line are run by Americans and Mexican-Americans. And if they are now to disgorge their cattle into our markets, we must suffer. That can't be helped.

But eventually the effect will be all to the good. The law, from what we gather, will make modest farms out of the present big holdings. That should mean fewer cattle in Mexico. And that means less foreign competition.

Grading Is Growing

AN ENCOURAGING DEVELOPMENT in the meat trade for the current year is the rapidly increasing demand for government graded and stamped beef. There was a temporary decline in volume early in 1935, due to the effects of the drought, but later in the year and continuing for the first nine months of 1936 (the latest figures available) the demand has constantly increased, and the tonnage now being graded far exceeds any previous figure.

In September, 1936, 41,563,000 pounds of beef were graded and stamped by the Bureau of Agricultural Economics, compared with 23,889,000 pounds in that month in 1935. For the first nine months of 1936, 339,443,000 pounds were so handled, compared with 196,000,000 pounds during January to September, 1935.

A development of significance is the increasing demand for the grading of "Medium" beef, both steer and heifer. This is fourth in the list of grades, following in order "Prime," "Choice," and "Good." One of the main arguments against compulsory grading of beef (these arguments come largely from the big packers) has been that it would hurt the sale of lower-grade meat and thereby adversely affect prices for the cattle from which this meat comes. The increasing call for grading of "Medium" beef clearly indicates that there is a demand for such beef in its own class and that retailers are finding that "truth in meats" pays, regardless of the grade thereof, and furthermore that the government stamp as a guaranty of the grade adds to, rather than detracts from, the value of "Medium" beef.

There has been previous confirmation of this in the results at Seattle, where a compulsory grading ordinance has been in effect for two years. While it appears to have stimulated the demand for the better grades, the price for the lower grades has fully maintained its proper relationship with prices for similar grades obtaining in eastern markets. A striking development at Seattle is the relatively small percentage of "Common," or fifth-grade, beef which has been available for sale as carcass beef. Perhaps the grading ordinance has had the effect of sending more such meat to the sausage trade—a highly desirable trend. At any rate, the disposal of the lower grades has not been a problem there, and prices for them have not been adversely affected. To whatever extent these lower grades have sold out of their class in the past, it has been to the advantage of the distributor rather than the producer; and it has doubtless been a deterrent to beef consumption.

But gains in grading have been registered despite growing and skillful oppo-

sition on the part of the big packers. Spokesmen for them decry the merit of the government system. They start off with assurances that they will remain neutral in the effort to pass a beef grading bill, and then proceed to give it both barrels. They claim that present government standards are not practical—a detail which can be remedied at any time and which is entirely beside the point in debating the merits of legislation calling for a single and compulsory standard of grades. They point to the difficulty of the government graders maintaining an exact standard to which all grading should conform. No one claims that beef grading is an exact science, but its sheer superiority over the old gradeless system is apparent in the constantly increasing demand for it. Exaggerated statements are made as to the number of graders that would be required under a compulsory law. One such rumor claimed that 300 graders would be needed in the State of Illinois alone. The Bureau of Agricultural Economics advises that less than 300 additional men, including required clerical help in Washington and in the field, would be needed to take care of the grading for the whole country. The packers uphold packer grading but not government grading. Their criticisms therefore deal largely with details, and hence weigh lightly in considering the fundamental purpose of the beef grading theory. In the main their strategy is to stall for time, urging delay on any grounds which offer at the moment. In the meantime every effort is being made more firmly to establish their private grading system. Then it can be claimed that any radical change would be damaging to the industry.

For a quarter of a century beef has sold itself. Little advertising has been given it. No other product readily named could carry such a load of misrepresentation and abuse as has been heaped on beef and yet so well remain in public favor. But no other product is so essential to the diet and the well-being of our race.

Producer interest in grading developed solely because of a crying need for improved conditions in the trade. It is seldom that processors accept willingly the needed reforms, no matter how clearly the need is indicated. But producers, having taken the lead, are not now of the mind to quit. Instead, interest in the subject is growing week by week. New converts to the grading program are being added continually.

H. R. 13022 (the grading bill introduced in the last session of Congress at the request of the American National Live Stock Association) has well served its purpose of creating interest and educating the public. Now, before it is reintroduced, it should be gone over carefully and amended as may be in the public interest. Then all hands

should unite in seeking its passage, so that all beef sold in interstate commerce will be sold fairly on its merits and all purchasers thereof may come to know and understand the various official grades, instead of being constantly bewildered by the present multiple system of grading and its numerous trade names with which they cannot hope to become familiar.

The Convention City

TEN YEARS—A DECADE SINCE the American National Live Stock Association gathered in convention in El Paso. Soon the air will be heavy with trail dust once more as cattlemen from throughout the country make their way again to El Paso for the Fortieth Annual Convention, January 12 to 14.

Those cattlemen who have not visited this largest of border cities since the last convention held here in 1927 will find that many changes have taken place in this far southwestern territory. Yet, despite these changes, they will find the same old spirit of western hospitality—the same mild winter climate and days of warm sunshine.

They will find that El Paso is still the cowtown—a town where the cattleman is always welcome and always at home. The lure of the Old Southwest and the Mexican border still pervades the atmosphere.

The many hotels in the downtown district of El Paso, all within from two to five minutes of the headquarters hotel, will provide ample accommodations for the visitors. There will be no lack of entertainment facilities for those hours when the convention is not in session—theaters, golf, sight-seeing, and Juarez, just on the other bank of the Rio Grande.

There are a great many places of interest, not only in El Paso but in the territory surrounding it. Those convention delegates who drive to El Paso will find many interesting side-trips to make, either coming or going.

The Carlsbad Caverns National Park has been developed into one of the greatest attractions of the Southwest. More than 115,000 visitors from all parts of the world are registered each year at this most magnificent and largest of all known caverns. The government has lighted more than seven miles of trails, all with indirect lighting, and has installed elevator service.

The White Sands National Monument, west of Alamogordo, New Mexico, and ninety miles north of El Paso, is entered by a road eight miles long. The true beauty of this great stretch of gypsum sand dunes is fully revealed at the end of this park highway.

Other places that will intrigue delegates who like to travel leisurely and see the country include Elephant Butte

Dam, Mescalero Apache Indian Reservation, the Lincoln National Forest in winter time, the Big Bend country, home of the Highland Hereford, and Davis Mountains.

Places of interest in the immediate territory include the Scenic Drive, paved highway across Mount Franklin; the old missions in the valley; the river rectification program, in which the federal government is confining the wandering Rio Grande to a definite channel through the irrigated section along the border; and Fort Bliss, the largest United States cavalry post, with millions of dollars in new construction.

Juarez, largest Mexican city of the border, is still a city of gay night-life and of ancient Mexican customs. Only five minutes from the heart of El Paso, it attracts thousands of visitors every year.

Since the days of the last convention in El Paso, transportation facilities have been greatly improved. Railroads with their conditioned trains give fast and comfortable service from all parts of the country. Giant airplanes carry hundreds of passengers to El Paso annually, while paved highways radiate from the city.

The delegates to this convention are assured of having a good time and a profitable convention, with all hands working to make it the outstanding one that the association has held in years.

Come to El Paso!

ALL STOCKMEN ARE CORDIALLY INVITED to attend the fortieth annual convention of the American National Live Stock Association. It will be held in El Paso, Texas, on January 12, 13, and 14, 1937.

Problems—Important matters confront the industry: The Argentine sanitary pact, by all odds our big problem; the reciprocal trade policy; the marketing problem; the growing question of government beef grading; the public domain; the national forests; and others.

Program—Speakers will include Governor William I. Myers of the Farm Credit Administration; Director of Grazing F. R. Carpenter or one of Taylor Grazing Administration officials. President C. B. Denman of the National Live Stock Marketing Association; Director A. L. Ward of the Cottonseed Products Association; an executive of the National Chain Store Association; railroad men; packers; government officials; and others. You will have a voice in the deliberation. Round-table discussions will be held on the Argentine sanitary convention problem and the beef grading question. Stockwomen should attend. It's their problem, too.

Entertainment—There will be entertainment: Dancing, parties, a barbecue in Juarez, banquets.

Executive Committee—To the Executive Committee we announce that a meet-

ing will be held the afternoon of January 11. The Executive Committee will be given a dinner in its honor by the Cortez Hotel in the evening of the 11th.

Rooms—Reserve your room now. Headquarters are at the Paso Del Norte. Other hotels are the Cortez, Hilton, McCoy, Knox, Gateway, Lockie, and Campbell.

Rail Rates—Reduced rail fares have been granted: Round trip, first-class fares approximately 2 cents a mile; coach fares, about 1.8 cents a mile; return limit, thirty days; non-certificate. Consult your local agent.

El Paso Offers Ballet Russe

A RUSSIAN BALLET IS TO PERFORM AT El Paso in the evening of January 12, which is the opening day of the American National Live Stock Association convention in that city. The spectacle is a most successful one, one that has been enthusiastically greeted in the cultural centers of America and Europe. It claims the distinction of being the only genuine Russian ballet in America today.

One performance only will be given, at prices as follows: 75 cents, \$1, \$1.50, \$2, \$2.50, and \$3, plus a state tax of 10 per cent. Reservations may be mailed to Mrs. Hugh Shannon, Symphony Headquarters, Hilton Hotel, El Paso, Texas.

We Wish to Express Our Approval, Our Commendations, and Our Congratulations

To the Members of

The American National Live Stock Association

For the Work Being Done by the Association for the Live-Stock Industry

Grant County Chamber of Commerce and Tri-County Hereford Association

Representing Luna, Hidalgo, and Grant County,
New Mexico, Producers

(Members of the American National Live Stock Association)

We Hope to See All Our Friends at The El Paso Convention

JANUARY 12, 13 and 14, 1937

GOVERNMENT

1937 Conservation Program

THE 1937 AGRICULTURAL CONSERVATION program, like the 1936 plan, offers payments to those farmers who meet specified conditions for shifting land from soil-depleting crops to soil-conserving crops and for carrying out approved soil-building practices.

Salient points of the new plan include:

1. Expenditures not to exceed the \$500,000,000 authorized to carry out the Soil Conservation and Domestic Allotment Act.

2. The plan of establishing soil depleting bases for farms has been continued. These bases will be the yardstick to measure diversion from soil-depleting to soil-conserving crops.

3. Payment for shifts from general depleting crops and cotton, tobacco, and peanuts will be continued, together with payments to sugar and rice producers who participate.

4. Crops will be classified as soil-conserving and soil-depleting. These classifications with some changes, follow those established in 1936.

5. The regional set-up for administration will be virtually the same as for 1936.

6. Administrative expenses of all county agricultural conservation associations will be deducted from the payments to farmers in their respective counties.

7. The range program, which applied only to Western Region states in 1936, will be extended to include range lands in western parts of the Southern and North-Central Region regions.

8. Allowance which growers of vegetables and fruits can earn through soil-building practices will be increased.

9. Any producer, no matter how small his farm, will have an opportunity to earn at least \$20. The minimum allowance in 1936 was \$10.

10. Producers with sizeable acreages in permanent pasture will be given an opportunity for additional participation in the program.

Report of Secretary Wallace

GROSS FARM INCOME FROM THE PRODUCTION of 1936 will probably approach \$9,200,000,000, as compared with \$8,508,000,000 in 1935, and \$5,337,000,000 in 1932, says Secretary of Agriculture Henry A. Wallace in his annual report to the President. The report indicates that the net income, in line with the

trend since 1933, will show proportionately more gain than the gross income.

The secretary notes that the agricultural improvement of the past three years has promoted the welfare of non-farm groups. Consumer buying power, he says, has risen with farm incomes, and the average employed wage earner could buy more food in 1936 than he could in 1929. Effects of the 1936 drought on the cost of living will probably be similar to those produced by the drought of 1934, but the report declares that the resulting small rise in the cost of living will be substantially offset by recovery in urban buying power.

Describing action taken under the Soil Conservation and Domestic Allotment Act of 1936, the report says that the shift from land exploitation to soil conservation is the logical outgrowth of changing economic and social conditions. As the occupation of the continent proceeded, Secretary Wallace says, the expansion program ran out of land and forced the land-hungry into sub-marginal farming, destructive grazing, overcropping, and forest devastation. The new law, he says, launches an attack on the dual problem of soil destruction and unbalanced cropping and will produce some crop adjustments as a by-product.

Development of a long-time policy for the critical areas in the Great Plains is an urgent necessity, the report states. This region is suffering from mistaken

Convention Headquarters

For the Annual Convention of the

American National Live Stock Ass'n

JANUARY 12, 13, 14

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efforts to introduce into it a type of agriculture suited only to humid areas. Wrong public policies, notably the federal homestead laws, have fostered unwise cultivation, and have condemned the cultivators to poverty. Research should be undertaken, the secretary says, to determine how many people the region can properly support. The fundamental purpose should not be to depopulate the region, but to make it permanently habitable. As an appropriate measure, the report suggests public acquisition of certain lands not suited to ranching or farming.

Quoting recent statistics as to the growth of tenancy in this country, the report says that in some areas more widespread ownership by farm operators is desirable, provided the new owners can be protected from certain economic hazards. It should be possible, it is stated, to improve leasing agreements with advantage to both landlords and tenants and to promote a type of agriculture calculated to give the cultivator a more secure occupancy on his farm, to conserve the soil, and to build sound rural institutions.

The report emphasizes the need for some form of crop insurance. The secretary would combine crop insurance with the principle of the ever-normal granary; that is, combine crop insurance with storage of surpluses in an effort to deal simultaneously with the problem of both the lean and the fat years. The plan should be optional, and the government is committed to no single plan, it is pointed out.

Discussing foreign trade in farm products, the secretary notes that agriculture participated in the general improvement that took place in our export trade as a whole last year, though neither the exports nor the imports of farm products were near the level maintained from 1920 to 1929. He says that the agricultural problem is not how to stop a moderate flow of competitive imports following crop failure, but how to plan for our normal conditions, which are those of a surplus country. Normally, says the report, American agriculture meets its chief competition abroad, because it produces largely for export; and an import exclusion policy would react adversely on the export trade.

Source of FCA Loan Funds

THE SOURCE OF LOAN FUNDS USED BY the permanent institutions under the Farm Credit Administration in their agricultural financing is explained in a Farm Credit Administration circular as follows:

"The federal land banks are now obtaining the new funds they lend through the sale of bonds to the investing public.

"The federal intermediate credit banks obtain their loan funds through the sale of debentures to the investing public.

"The banks for co-operatives are making their loans from capital funds. When additional funds are needed, however, they may discount loans with the federal intermediate credit banks. The central bank for co-operatives also may issue its own debentures and may lend to the district banks for co-operatives.

"The production credit corporations are not engaged in lending activities, but the production credit associations, supervised by the corporations, obtain their loan funds by borrowing or discounting with the federal intermediate credit banks."

Some Crop Insurance Points

A SKETCH OF SOME OF THE THINGS that the Department of Agriculture's study of crop insurance has brought to the forefront is found in the below excerpts from Secretary Wallace's talk, entitled "Responding to Change in Agriculture," made before a meeting of the Land Grant College Association, held at Houston, Texas, on November 16. The statements are not intended as detailed proposals, says Mr. Wallace, but to help in taking stock of the proposition.

"The idea would be to set up all-risk insurance covering a certain percentage of average yields as figured over a period of years. It would be wholly optional with farmers whether they wished to come into the plan. The premiums on a given farm would be based, let us say, upon the loss experience on that farm as shown over a period of years, the figure for the individual farm to be adjusted by using the loss experience of the country as an adjusting factor.

"At least four definite problems arise in this consideration of a system of crop insurance with payments in kind. First, there is the problem of determining loss rates and premium rates. Second, there is the problem of collecting and assembling such premium payments made in kind. Third, naturally the question of storage at once arises—where and how shall the quantities of crops so collected be stored? Fourth, there is the question of the disposition of the stored product—should losses be paid directly out of it or should it be sold and the proceeds distributed in dollars equivalent to the product? If some of the stored product is sold, should there be a policy of replacement by purchases in the market so as to maintain the reserves?

"As one alternative, possibly the farmer might pay premiums in cash equivalent and then the government might convert this cash into the physical commodity and store the latter. The payment of losses also might be made in various ways. The farmer might be paid in kind; or possibly he might be given a warehouse receipt; or perhaps

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he might be given an option on the given quantity of stored product due him which he could liquidate and receive a check therefor.

"A possibility bearing upon the point I mentioned a moment ago of storage in years of plenty, is that farmers might pay their premiums only in years of good crops. That is to say, when a man had a bad year and a poor crop he would make no premium payment that year, but in a season of good crop he would pay premiums not only for the good year but for the bad ones also. . . .

"Certainly we do not want to put a premium on bad farming nor upon farming bad land. I think that if the cost of insurance is based in considerable part upon the loss experience of the specific farm, in each instance, it will tend to take care of that aspect. Then if some kind of a system of payments in kind is set up, it will tend to take care in part of the price problem. And if payment of the premiums can be conditioned to the good crop years, that will tend to take care not only of one great difficulty from the farmer's standpoint but it will help to iron out a surplus-shortage gyration that has bedeviled producers and markets since the beginning of this modern era."

U. S. Tick Quarantine Lifted

AS A RESULT OF ACTIVE DIPPING CAMPAIGNS to eradicate cattle-fever ticks, the Department of Agriculture has withdrawn federal quarantine from 28,150 square miles of territory in Florida, Louisiana, and Texas. The effect of this action is to release from quarantine all the remaining parishes in Louisiana, eight counties and parts of two other counties in Texas, and two counties in Florida.

By this release Louisiana became the thirteenth of the fifteen southern and southwestern states—that were in quarantine on July 1, 1906—to gain freedom from the federal cattle-tick quarantine. This accomplishment was largely possible through the co-operation of state and local live-stock officials and through liberal allotments of emergency relief funds supplied by CWA, FERA, and WPA.

The parishes released on December 1 include Allen, Avoyelles, Beauregard, Caldwell, Catahoula, De Soto, Evangeline, Franklin, Grant, Jackson, La Salle, Morehouse, Natchitoches, Ouachita, Rapides, Red River, Richland, Sabine, Union, Vernon, West Carroll, and Winn, and the remainder of Calcasieu and St. Landry parishes.

In Florida, De Soto and Seminole counties are released from quarantine.

In Texas, Brooks, Jim Wells, Kenedy, Leon, McMullen, Madison, Walker, and Willacy counties, and parts of Cameron and Hidalgo counties are released.

The quarantine in the Territory of Puerto Rico is continued.

The total area under federal quarantine in the United States on July 1, 1906, amounted to 728,565 square miles. The area released on December 1, 1936, amounted to 28,150 square miles. This makes a total of 694,994 square miles released, and leaves 33,571 square miles in quarantine—all in Florida and Texas.

Counties in Texas still under quarantine are Shelby, Houston, Nacogdoches, San Augustine, Angelina, Sabine, Trinity, Polk, Tyler, Jasper, Newton, San Jacinto, Montgomery, Harris, parts of Brazoria and Galveston, Chambers, Jefferson, Orange, Liberty, Hardin, Webb, Duval, Zapata, Jim Hogg, Starr, parts of Hidalgo and Cameron.

Clippings from the Capitol

The coconut oil tax was upheld in a recent United States Supreme Court ruling refusing to consider the suit of Haskins Brothers & Company, soap manufacturers, against constitutionality of the 3-cent processing tax on imported coconut oil. The court also refused to entertain a second action asking that the Secretary of the Treasury be restrained from paying the Philippine government \$30,000,000 in receipts from the tax. An appeal of the Iowa Soap Company against a ruling refusing an injunction to prevent collection of the tax was also turned down.

* * *

The most recent signatory to a reciprocal trade pact with the United States is Costa Rica, which becomes the fifteenth country with which agreements have been made. Coffee and bananas are the chief exports of Costa Rica, and these, under the agreement, are bound on the free list along with some other concessions. United States exports affected include grain and cereal products, lard, meat and dairy products, fruits, and other items.

* * *

Production credit associations on November 1, 1935, had \$93,000,000 of loans outstanding. Since then, cash advances amounted to \$173,000,000, making a total of \$266,000,000 of short-term credit available for crop and live-stock production during the twelve-month period. Liquidation of loans since the present marketing season began has reduced loans outstanding to \$111,000,000 as of November 1, 1936.

* * *

A modified plan for control of Bang's disease has been outlined by Dr. John R. Mohler, chief of the Bureau of Animal Industry. The plan involves the separation of a herd into two units, one for non-reactors, the other for quarantined animals. Calves born in the quarantined unit may be vaccinated for Bang's disease when between four and eight months of age. The idea would be to protect valuable seed stock.

Options have been closed on more than 9,000,000 acres of land in forty-four states by the Resettlement Administration. This acreage, except for a few scattered tracts, represents all the land which will be included in the RA land utilization program. The optioned acreage involves an expenditure of \$39,916,603, or an average of \$4.40 an acre.

* * *

A new test for detecting mastitis, a disease of dairy cattle which often results in abnormal milk and changes in the udder tissue in the animals infected, has been developed by the Department of Agriculture. It is called the "Hotis test," named after its originator, the late R. P. Hotis, of the Bureau of Dairy Industry.

* * *

The Social Security Board is considering the creation of a voluntary old-age insurance program to protect 16,000,000 agricultural and domestic workers excluded under the present law. The suggested plan calls for creation of a government pool to make monthly pensions available at cost.

* * *

Butter graded by the government during the year ended June 30, 1936, was about 15 per cent of the total creamery butter production in the United States—more than 242,000,000 pounds. This was an increase of nearly 10 per cent over the preceding year.

* * *

"Rural resettlement administration in all probability will come into the agricultural department in the reorganization of governmental departments."—Secretary Wallace, at a recent dedication of an RA farm project.

* * *

R. M. Evans, farmer, of Laurens, Iowa, has been named a special assistant to Secretary of Agriculture Wallace. Mr. Evans is a graduate of Iowa State College and has spent the past fifteen years in farming and cattle feeding.

* * *

Federal relief activities in drought counties will be held down, officials hope, to 300,000 families through the winter. This would be less than half the number aided heretofore by the WPA and RA.

* * *

Farm real estate values in the United States rose 4 per cent last year and are 12 per cent higher than they were in the spring of 1933, according to the Bureau of Agricultural Economics.

* * *

The federal meat-inspection stamp on dog food containers has been withdrawn by a recent BAI order.

* * *

Awards for the purchase of 2,002,100 pounds of dry skim milk for relief were recently made by the AAA.

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ONE HUNDRED AND THIRTY-SEVEN loads of steers were shown in the International Exposition carlot fat-cattle display—the largest, with a single exception, ever shown. They sold at an average of \$13.42 per cwt. Average last year on eighty-one loads was \$16.03.

The grand champion carload—1,100-pound Angus cattle exhibited by J. F. Mommsen, Niles, Iowa—topped at \$27.75 per cwt.

Champion carload of Hereford steers averaged 1,017 pounds and sold at \$19.25—the second highest price in the carlot sale. Forty-seven loads of Angus ranged from \$13 to \$27.75 and averaged \$14.04. Seventy-eight loads of Herefords ranged from \$12 to \$19.25 and averaged \$13.11. Twelve loads of Shorthorns ranged from \$12.25 to \$14.25 and averaged \$13.06.

For the third successive year the grand champion steer of the International sold at \$3 a pound. The price has not been exceeded since 1929, when the all-time record of \$8.25 a pound was established. The 1936 grand champion—G. Page, a purebred Angus, calved May 12, 1935, and bred, fed, and shown by the Oklahoma Agricultural and Mechanical College—weighed 1,020 pounds.

Reserve grand champion steer—a purebred 1,180-pound Hereford, bred, fed, and shown by the Wyoming Hereford Ranch, Cheyenne, Wyoming—sold at 70 cents a pound.

The grand champion carload of the feeder exhibit—407-pound Hereford steer calves, bred and exhibited by Fred DeBerard, Kremmling, Colorado—sold at \$16 per cwt.

Thirty carloads of International Show hogs—crossbreds—sold at an average price of \$10.90 per cwt., compared with \$10.91 for the nineteen loads in the 1935 show sale. The top price of \$13, paid for the grand champion load, matched the price of the grand champion load in 1935.

Grand champion carload of lambs—Southdowns—sold at \$30.50 per cwt. The price compares with \$27.25 for the grand champion carload of the 1935 show and is the highest since 1929.

An all-time record price of \$1.05 a pound was paid for the grand champion steer in the junior feeding contest for 4-H Club members. The steer was a 1,250-pound Angus. The champion Hereford 4-H steer brought 25 cents a pound, and the champion Shorthorn 4-H steer sold for 22½ cents a pound.

King Brothers, Laramie, Wyoming, were awarded the grand championship in the wool exhibit on a fine grade, purebred Rambouillet ram fleece. The reserve grand championship was given on a purebred fine Delaine fleece.

The grand champion barrow of the show was a 270-pound Berkshire.

The grand champion wether lamb—a Southdown—sold at \$1.15 a pound.

TRAFFIC

Traffic and Transport

BY CHAS. E. BLAINE

Traffic Counsel, A. N. L. S. Ass'n

Live-Stock and Meat Rates

EXAMINER A. S. WORTHINGTON, in No. 26717, *Chicago Live Stock Exchange vs. Abilene and Southern et al.*, and No. 26935, *Agar Packing and Provision Company et al. vs. Alton et al.*, has recommended that the Interstate Commerce Commission find: (1) that rates on live stock, fresh meats, and packing-house products, in carloads, from points in Western Trunk Line Territory to Chicago and East St. Louis, Illinois, and to St. Louis, Missouri, are not unreasonable or otherwise unlawful; (2) that rates on live stock, in carloads, from the same origin territory to the Union Stock Yards at Chicago and via those yards to destinations in the territory east of the Illinois-Indiana state line are not unduly prejudicial and unjustly discriminatory; and (3) that the complaints be dismissed.

The stock-yard's complaint alleged that the rates on live stock from Western Trunk Line Territory to the Union Stock Yards were in violation of Section 1 of the Interstate Commerce Act; that the rates from the same territory via Chicago to destinations east of the Illinois-Indiana state line, lower on live stock which avoided the Union Stock Yards than on live stock which moved via the yards, were unjustly discriminatory and unduly preferential in violation of Sections 2 and 3; and that the assessing, from Western Trunk Line Territory to Chicago and points east thereof, of lower carload rates on meats than on live stock unduly preferred western slaughterers and unduly prejudiced complainant in violation of Section 3 of the act.

The Agar complaint alleged that the rates on live stock from various points in Iowa, Nebraska, South Dakota, Kansas, Missouri, and Minnesota to Chicago, East St. Louis, and St. Louis were unreasonable and unduly prejudicial.

The recommendation of the examiner does not apply to the switching charge of \$2.70 per car at Chicago, as the propriety of said charge, as stated by the examiner, is now before the commission in another case.

National Organizations Intervene

The American National Live Stock Association and the National Wool Growers' Association intervened in support of the Section 1 allegations but in opposition to the Sections 2 and 3 allegations of the complaints.

Exceptions to the Examiner's report

must be filed not later than January 4, 1937.

Bureau of Motor Carriers' Rulings

The Bureau of Motor Carriers publishes tentative and provisional rulings from time to time. Pending authoritative formal action by the commission, these administrative rulings have the force of commission decisions. The following rulings refer directly to the agricultural exemptions of Section 203 (b), Motor Carrier Act, 1935:

Ruling No. 18.—A carrier whose intrastate and interstate transportation is confined exclusively to transportation of live stock, fish, shell fish, or agricultural commodities (not including manufactured products thereof) is subject to the Motor Carrier Act only in so far as concerns requirements regarding safety of operation, maximum hours of service of employees, and standards of equipment hereafter prescribed by the commission.

Ruling No. 42 (supplementary to No. 18).—The carrier whose operations interstate are confined to live stock, fish, or agricultural commodities, but whose intrastate operations include transportation of commodities of a general kind becomes subject to all provisions of the act relating to a common carrier. The exemption contained in Section 203 (b) (6) does not apply unless the vehicles are used exclusively in the transportation of live stock, fish, or agricultural commodities. Hence the intrastate transportation of other commodities prevents the use from being exclusive.

Ruling No. 43.—A common carrier engaged in interstate transportation of live stock from farms and ranches to markets located in a different state, transporting no other products outbound but on the return trip transporting general merchandise, is not within the exemption, as his vehicles are not used exclusively in the transportation of the exempted articles. He must, therefore, file tariffs and otherwise conform to the act in so far as the transportation of live stock and agricultural commodities is concerned.

Ruling No. 6.—Logs are not agricultural commodities within the meaning of Section 203 (b) (4a and 6) and therefore not exempt.

Ruling No. 21.—Fresh fruits are considered agricultural commodities.

Ruling No. 22.—Ginned cotton is not a manufactured product but is an agricultural commodity within the meaning of the section.

Ruling No. 23.—Canned fruit and canned vegetables are manufactured products of agricultural commodities and therefore not exempt.

Ruling No. 44.—Cottonseed meal and

cottonseed hulls are manufactured products and therefore not exempt.

Ruling No. 13.—A contract carrier may not interchange interstate shipments with common carriers. Such an interchange of interstate shipments is a common-carrier service and not a contract-carrier service, and a contract carrier may not engage in such interchange without changing his status to that of a common carrier.

Another Investigation of Surcharges

Shippers of the nation are again confronted with another general investigation by the commission regarding continuation of surcharges. On November 18, 1936, the commission denied the Class I railroads' petition of October 23, referred to at page 22 of the November issue of *THE PRODUCER*, to the extent that it sought modification of outstanding orders and Fourth Section relief forthwith but without prejudice to such modification and relief as might be deemed proper after hearing as to the lawfulness and propriety of the increased rates proposed in said petition, and transferred the petition from *Docket Ex Parte 118* to *Ex Parte 115* for hearing and decision.

The initial hearing has been assigned for January 6, 1937, in the office of the commission in Washington. Subsequent hearings at other points will be announced later by the commission. The present emergency charges are now published to expire December 31, 1936.

The Class I railroads, on November 21, 1936, filed a voluminous petition with the commission in *Ex Parte 115*, modifying their former proposals regarding the volume of the proposed surcharges. In separate petition under the same date the Class I railroads ask authority of the commission to continue in effect the present surcharges for a period of sixty days following the final decision of the commission in *Ex Parte 115*. The amended petition proposes the continuation of surcharges on dairy products, fresh meats, and packing-house products, salt, cottonseed cake and cottonseed meal, and many other commodities consumed or produced by the live-stock industry.

Stripped of their verbiage, the various petitions of the Class I railroads are grounded upon their invariable practice of establishing and maintaining rates on the basis of what they think the traffic will bear, as distinguished from the cost of performing the service plus a reasonable profit.

Anticipating the cancellation of the present surcharges with the close of the present year, the railroads have, in many instances, published rates to become effective on January 1, 1937, which include the present surcharges. In other words, the bases of the proposed rates are the present base rates plus the present surcharges.

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Basis. Facilities unexcelled.
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Feed and Service Charges

Railroads, in hearing before Examiner Kobel of the Interstate Commerce Commission at Denver on December 5 in I. & S. Docket 4271, *Feed and Service Charges at Pacific Coast Stock Yards*, conceded, under cross examination, that the suspended schedules, had they become effective, would have had the effect of requiring the railroads to assess and collect charges from shippers in instances in which the railroads did not perform the service. Railroad representatives testified that such effect was not the desire or intention. Hence, railroad counsel agreed that the commission should enter an opinion and order finding the suspended schedules not justified and dismiss the proceeding without prejudice to the railroads publishing new schedules containing provision to the effect that in cases where the railroads do not perform the services they shall collect charges therefor.

This proceeding grew out of schedules published by the lines in the North Pacific Coast Freight Bureau Territory to become effective November 9, 1936, as stated at page 21 of the November PRODUCER.

The American National Live Stock Association and the National Wool Growers' Association filed joint petition with the commission asking for the suspension of the proposed schedules. The petition was granted.

The railroads were represented at the hearing by Dana T. Smith, attorney, and C. C. Beach, assistant to the freight traffic manager of the Union Pacific. Protestants were represented by B. E. Reed, of the transportation department of Cudahy Packing Company, and Chas. E. Blaine.

Charles Henry Westmoreland

CHARLES HENRY WESTMORELAND, of Imperial Valley, California, died on November 24, 1936. He was born in Springfield, Missouri, on June 7, 1864. He pioneered on the plains in the Panhandle and came to California in 1908 and to the Imperial Valley in 1911, and has owned and operated, with his son Roy, several stock ranches throughout the valley.

He leaves his wife, son, and daughter.

Adolph Domengine

IN THE PASSING OF ADOLPH DOMENGINE, of Oilfields, California, the livestock industry has lost another staunch supporter. Adolph Domengine was born in San Francisco on February 6, 1856. In 1875 he became employed by Miller and Lux, later acquiring a ranch in Fresno County, California. He always took an active interest in national and local live-stock matters. Surviving him are three children.

MARKETS

November Markets

BY H. W. FRENCH

Bureau of Agricultural Economics

DENVER, December 5, 1936.

THE NOVEMBER LIVE-STOCK market gave a good account of itself. During election week receipts in all branches moderated and a remarkably strong tone developed. The cattle and lamb trade was influenced bearishly by the big supplies of poultry, but quick recovery was reported. A very healthy situation was noted for hogs in the face of increasing receipts, and the usual winter price-break may not develop, or at least it is almost certain to be less severe than normally.

Steers and Heifers Forced Up

Cattle buyers at Chicago during November were willing to support the market with rare exceptions, when they suddenly became bearish. As a whole, however, the sellers had control, and forced prices of steers and heifers to new high levels. This rise, although somewhat belated, was sharp, and the strictly good-to-choice grades enjoyed the biggest gains. Local buyers, as well as eastern concerns, purchased freely, with medium-weight and heavy offerings working upward along with yearlings, although the latter kind still commanded a premium. Near the end of the month buyers had access to more well-finished steers of practically all weights because of the big number of loads sifted out of the International Show entries by the sifting committee. It is the trade opinion that there will be a scarcity of the upper grades during the remainder of the year and early in 1937.

Cow Market Got Little Support

Well-finished steers enjoyed the biggest outlet, but there was a fairly good call for the common grades as contrasted with rather indifferent demand for middle grades most of the month. She-stock did not follow the trend of steers, with the exception of strictly choice and prime fed heifers. The cow market enjoyed little support from any source, and the big end of matured she-stock proved of the common and cutter type. Wide fluctuations prevailed in many classes, although it appeared as though the changes were most severe on slaughter calves and vealers.

Cattle Prices

Closing November prices at Chicago on better-grade beef steers were fully 50 cents to \$1 higher than at the end of October, while common and medium grades ruled steady to 25 cents higher in the main. Heifers were largely 25 to 75 cents higher, although best gained \$1

to \$1.25. Beef cows closed around 25 cents to 50 cents lower, with cutter grades steady to 25 cents off. Bulls were steady to 25 cents higher at the end of November. Closing prices for slaughter calves and vealers were largely steady to strong.

The top on fed steers was \$12.85, and many of the show cut-out loads sold around \$12 to \$12.50. Previous to the closing week there were not many sales above \$12. Some yearlings which made \$12 were feed-lot mates of others marketed on the October break at \$10.20. Early in November there were many heavies and medium weights at \$11.50 to \$11.75, which corresponded in quality and finish to those early in October at \$9 to \$9.50. Some of those at \$11.75 were practically identical with others from the same feed-lot at \$9.50 in October. There were many loads above 1,600 pounds which had to sell at \$9.75 to \$10.50. Only the low-grade steers, unless excessive in weight, were to be had from \$9.25 down.

Mixed yearling steers and heifers sold up to \$12.10 and straight heifers averaging 958 pounds reached \$12. Not many heifers at the outset in November sold upward of \$10, and the lower grades then were to be had at \$8.25 to \$9; but many of the well-finished loads later in the month cleared at \$10.50 to \$11.50. Most of the beef cows sold at \$4.50 to \$5, with a fair number around \$6 and scattered lots of natives at \$6.50 to \$7. Cutter grades were numerous at \$3.25 to \$4.25. Heavy-weight medium-grade bulls made a practical top of \$5.75 and many cleared at \$4.75 to \$5.50, with common grades under \$4.50. Best vealers at the low time fell down to \$8.50 but bounded back later until \$10 to \$10.50 tops were registered frequently and even \$11 for selects.

Stocker Demand Healthy

The stocker and feeder demand was active practically all month, and many who had waited to fill their feed-lots in anticipation of a break in prices entered the market freely, so that the market had a very healthy undertone. The call favored fleshy offerings, as there were very few buyers willing to take thin stockers of any kind. Some of the buyers were after cattle suitable for a sixty- to one-hundred-day feed, but others gave preference to those which they expected to feed for a much longer period. Closing November prices for stocker and feeder steers were largely 25 to 50 cents higher than a month earlier. A similar gain was reported on calves. Country buyers paid prices that were steady to 25 cents higher for she-stock. The better-grade steers went out chiefly at \$6.75 to \$7.75, with a fair

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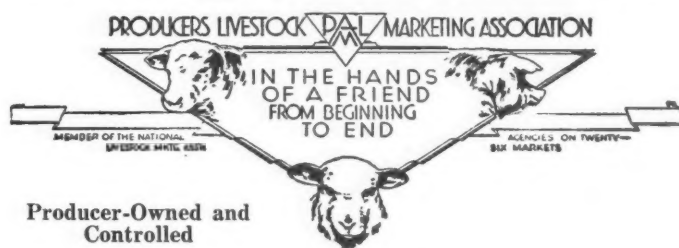
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quota at \$8, and 900-pound Montanas as high as \$8.25. Some fed steers around 900 pounds sold for sixty-day finishing as high as \$9.25. Plain light stockers were secured frequently at \$4.50 to \$5.50. The better-grade calves were taken at \$7 to \$8 and some from Colorado topped at \$8.35. The average cost of steers taken to the country from Chicago during the last week of November was \$6.26, against \$6.68 the corresponding week last year. The country cost of steers from July to October, inclusive, figured \$5.91, as compared with \$7.14 a year earlier.

Hog Receipts Large

Quality of hogs showed considerable improvement and supplies increased, although the percentage of sows was materially reduced. The receipts during the second week of the month were the largest since December, 1934. There was a marked upswing in the arrivals direct to packers and this condition prevailed at many of the other centers. All interests were in the market throughout, and all weights seemed to be needed, although offerings above 220 pounds continued to command a premium, while light lights remained at the low end of the price range. Closing prices were largely 25 to 50 cents higher than a month earlier, with weights under 160 pounds gaining least. Sows were mainly 50 cents higher, and slaughter pigs were mostly 15 to 25 cents up. The November top on butchers was \$10, registered on the final day. The bulk of the 190- to 260-pound offerings sold at \$9.50 to \$9.85 and most of the 150- to 180-pound kinds scored \$8.90 to \$9.50. Slaughter pigs were taken freely at \$7 to \$8, but best strong weights scored \$8.50 to \$8.75. Packing sows were most numerous at \$8.75 to \$9.25, with roughs down to \$8 and best, \$9.40 to \$9.50.

Slaughter Lambs Irregular

Moderate receipts and irregular markets featured slaughter lambs during November. Matured sheep were well taken throughout, and there continued a good call for feeder lambs, although supplies of the latter diminished rapidly near the close. Election week witnessed one of the sharpest price recoveries of the season. The price gain, however, encouraged increased marketing the next week, resulting in a big loss. Later the market worked toward a firmer level, closing in more satisfactory condition. Natives were by far the most numerous, although there was a seasonal increase in the number of fed westerns, while the straight rangers decreased considerably. Fat-lamb prices finished strong to 25 cents higher than at the end of October, while slaughter ewes showed 50 to 75 cents upturn. Feeder lambs were 25 to 50 cents higher.

A good share of the range lambs to killers scored \$9 to \$9.25, while many of the natives scored \$9 to \$9.50, with a top of \$9.75. The lower-grade natives had

to sell around \$8 to \$8.75 most of the month, although during the low week strictly choice kinds topped at \$9.15. Fed western lambs sold largely at \$8.75 to \$9.25, with best at \$9.50. Shorn lambs sold frequently at \$7.50 to \$8.25, but during the month's high time some scored \$8.50 to \$9. Slaughter ewes were numerous at \$3 to \$4.25 and the top was \$4.60, or the highest since July. Very low-grade kinds at one time were to be had at \$2.50 to \$2.75. There was a very wide range in prices of feeder lambs, and underweights always sold at considerable discount. Best, mostly from 65 pounds up, sold at \$8 to \$8.50, but late in the month very little passed \$7.85, as quality fell off somewhat. Many offerings sold at \$6 to \$7.50, but usually averaged under 60 pounds. A five double-deck consignment of 42-pound Montanas sold down to \$4.75 and some averaging only 31 pounds went as low as \$3.

Live Stock and Meat Situation

DECLINES RANGING FROM 9 TO 14 PER cent in the wholesale prices of dressed lamb, small declines in the wholesale prices of fresh veal, and slight increases at wholesale in prices of most cuts of beef and most fresh pork featured the live-stock and meat situation during November, according to a review by the Institute of American Meat Packers.

Production of all meats is estimated to have been about 25 per cent greater than during November a year ago; pork and lamb, at least 65 per cent greater; beef, apparently slightly greater; and lamb and mutton and veal, substantially greater.

Some further improvement in the Bureau of Labor Statistics' index of factory pay rolls was shown for a large number of manufacturing industries. Consumer purchasing power in October, measured by this pay roll index, was about 17 per cent over that of October a year ago—the largest increase recorded for that period. Some improvement was noted in demand for American products in foreign markets.

Cattle

Although receipts of cattle in November at seven principal markets were slightly below those of a year ago, it is estimated that the number dressed in federally inspected plants was slightly larger than in November last year.

Marketings included the heaviest supply of the less-finished grades so far this year and an unusually large number of well-finished cattle at the opening of the month, but the supply of medium grades was somewhat less than during October. During the second and third weeks, however, the supply of well-finished cattle dropped considerably, somewhat fewer canners and cutters were marketed, and prices of most

grades of live stock advanced slowly.

There was a good demand for fresh beef during the month, especially in the case of beef from the heavier weight animals. Wholesale prices of fresh beef closed at levels somewhat higher than those prevailing at the opening of the month.

Marketings of vealers and calves were somewhat smaller than those of last month. Prices at the end of the month were about the same as those at the opening. The generous supplies and the decline in the demand for fresh veal were reflected in wholesale prices, which were somewhat lower than those prevailing at the opening.

Hogs

It is estimated that the number of hogs dressed during November was from 80 to 85 per cent greater than in November a year ago and somewhat larger than the average number dressed during that month for the past five years. Receipts increased substantially over those in October, but prices changed very little. Hog prices rose steadily the first eleven days, declined to the sixteenth, and then rose to slightly higher levels than those prevailing at the beginning.

The average live weight of hogs dropped off somewhat during November. Yields continued unsatisfactory, but some improvement was noted over those in October. The yields, however, were somewhat lower than is usual for this season of the year, owing to the lack of finish resulting from poor feed conditions in the principal hog-growing areas.

Sheep and Lambs

Marketings of sheep and lambs in November were about 20 per cent larger than in the same month a year ago, and although there was about a 30 per cent drop below receipts during October this year, prices of live lambs remained about the same as at the close of the previous month. Sheep prices advanced considerably. Prices of lambs were slightly higher at the close. Other classes sold somewhat higher. Wholesale prices of dressed lamb showed considerable declines. Mutton also declined somewhat.

Higher Wool in Good Demand

BY H. W. FRENCH

WOOL GROWERS ARE ENJOYING A GOOD season, with buyers everywhere. The upswing in prices apparently makes no difference, as all offerings are well taken. In the wool-producing areas buyers are numerous, and at Boston the market is getting regular support. American buyers are reported as very active in the foreign markets as well, particularly in Australia and South America.

Domestic wool at Boston had persistent demand at higher prices, and the volume of trading is overshadowed by

the price advances. Withdrawal of some offerings was reported in anticipation of more upturn. Some buyers are dropping out for the moment, as the pace has been swift. Supplies of Ohio fleeces are restricted to the extent that each sale was the signal for another advance. Territory wools are in fair volume and values were higher on all grades. Late in the month some buyers hesitated to pay the current asking prices for territory wool, while others entered the market for a sufficient volume to keep the prices working upward.

Spot foreign wool had a decidedly strong tone. Purchases included spot holdings and offerings for import. Spot foreign wool is available at about the prevailing quotation of import.

Near the close of November, bulk staple combing length fine territory wool in original bags brought \$1.03 to \$1.05, scoured basis, at Boston, while 98 cents to \$1.01 was realized frequently on short French combing fine original bag lines. Average twelve-month Texas wools made \$1 to \$1.02, scoured basis.

Farm-Product Prices

AVERAGE PRICES RECEIVED BY FARMERS at local markets during November, 1936, compared with prices in that month in 1935 and with the average for 1909-14, are given by the Department of Agriculture as follows:

Commodity	Nov. 15 1936	Nov. 15 1935	Five-Yr. Aver.
Wheat (bu.)	1.065	.876	.884
Corn (bu.)	.946	.564	.642
Oats (bu.)	.442	.258	.309
Barley (bu.)	.327	.378	.619
Rye (bu.)	.315	.404	.72
Soybeans (bu.)	1.121	.692
Cotton (lb.)	.12	.115	.124
Cottonseed (ton)	33.28	33.27	22.01
Potatoes (bu.)	.98	.621	.697
Sweet potatoes (bu.)	.795	.506	.878
Hay (ton)	10.73	7.25	11.87
Tobacco (lb.)	.229	.206	.10
Peanuts (lb.)	.033	.031	.048
Apples (bu.)	.929	.686	.961
Hogs (cwt.)	8.74	8.54	7.22
Beef cattle (cwt.)	5.97	6.05	5.21
Veal calves (cwt.)	7.46	7.65	6.75
Sheep (cwt.)	3.58	3.89	4.53
Lambs (cwt.)	7.23	7.57	5.87
Butter (lb.)	.308	.282	.255
Butterfat (lb.)	.331	.290	.263
Whole milk (cwt.)	2.07	1.86	1.79
Whole milk (qt.)	.107	.098	.068
Chickens (lb.)	.132	.150	.114
Eggs (doz.)	.325	.301	.215
Wool (lb.)	.272	.226	.176
Milk cows (head)	52.66	49.90	48.00
Horses (head)	90.56	88.90	136.60
Mules (head)	108.60	104.60

*Retailed by farmers directly to consumers.
†Preliminary.

HIDE QUOTATIONS

Hide quotations at Chicago on December 2 are reported as follows: Packer hides—heavy native steer, 15½ cents; light, 13½; heavy native cow, 14; light, 13½ to 13¾; light Texas steer, 14; butt-branded steer, 15½; branded cow, 13; Colorado steer, 15; native bull, 11; calfskins—packer kipskins, 13½ to 17; packer calfskins, 22½ to 24½; country hides—all weights, 10 to 10¼; extremes, 12 to 12¼; branded, 8 to 8¼; buffs, 10½ to 10¾; bull, 7¼.

Chicago Prices

LIVE STOCK			
	Dec. 1, 1936	Nov. 2, 1936	Dec. 2, 1935
SLTR. STEERS (1,100-1,500 lb):			
Choice	\$10.00-12.00	\$10.00-11.00	\$12.75-14.00
Good	9.00-11.00	9.00-10.25	9.50-13.00
SLTR. STEERS (900-1,100 lb):			
Choice	11.00-12.00	10.25-11.00	12.50-13.75
Good	9.25-11.00	9.25-10.25	9.25-12.75
SLTR. STEERS (900 lb up):			
Med	7.25-9.25	7.75-9.25	7.25-9.50
FED YOUNG STEERS:			
Good-Ch.	9.25-12.00	9.25-11.00	9.00-12.75
HEIFERS:			
Good-Ch.	8.25-12.00	8.25-10.75	8.50-12.00
COWS:			
Good	5.50-6.50	5.25-6.50	5.25-6.50
CALVES:			
Good-Ch.	5.50-8.50	5.50-8.50	7.00-11.00
FEEDERS AND STOCKERS:			
Good-Ch.	6.25-8.50	6.25-8.00	7.25-8.25
Com.-Med.	5.00-6.50	4.50-6.25	5.25-7.25
HOGS:			
Med. Wts.	9.40-10.00	9.25-9.55	9.75-9.90
LAMBS:			
Good-Ch.	8.25-9.25	8.50-9.25	10.50-11.50
EWES:			
Good-Ch.	3.50-4.65	2.75-4.10	4.40-5.50
WESTERN DRESSED MEATS			
STEER (700 lb up):			
Choice	\$14.50-16.00	\$14.00-15.00	\$16.50-18.50
Good	12.50-14.50	12.50-14.00	14.00-16.50
STEER (500-700 lb):			
Choice	15.50-17.50	14.50-16.00	16.50-18.00
Good	12.50-16.00	12.50-15.00	13.50-16.50
YEARLING STEER:			
Choice	16.50-18.00	15.50-16.50	16.50-18.00
Good	13.00-16.50	12.50-15.50	13.50-16.50
COW:			
Good	9.00-9.50	9.00-10.00	10.00-11.00
VEAL:			
Choice	14.00-15.00	13.50-14.50	15.50-16.50
Good	12.50-14.00	12.50-13.50	14.50-15.50
LAMB:			
Choice	12.00-15.00	14.00-16.00	18.00-18.50
Good	11.50-14.00	13.50-15.00	17.00-18.00
MUTTON:			
Good	6.50-8.00	7.00-8.50	9.00-10.00
PORK LOINS:			
8-12-lb Av.	16.00-18.00	16.00-17.50	20.50-22.50

Live Stock at Stock Yards

	October		First 10 Mos.	
	1936	1935	1936	1935
RECEIPTS—				
Cattle*	1,726	1,864	12,910	12,255†
Calves	713	681	5,683	5,503‡
Hogs	2,613	1,652	20,105	15,855
Sheep	2,871	3,055	20,742	22,247
TOTAL SHIPMENTS—				
Cattle*	800	946	5,029	5,090
Calves	260	253	1,845	1,787
Hogs	830	463	6,227	4,893
Sheep	1,723	1,860	10,431	11,185
STOCKER AND FEEDER SHIPMENTS—				
Cattle*	422	549	2,066	2,310
Calves	94	80	416	396
Hogs	62	25	508	274
Sheep	721	886	2,318	2,548
FEDERAL INSPECTION SLAUGHTER—				
Cattle*	1,124	1,083	8,997	7,818
Calves	585	531	5,099	4,718
Hogs	3,492	2,135	27,082	20,761
Sheep	1,742	1,765	14,099	14,869

Three ciphers omitted. Receipts and shipments are for sixty-nine markets.

*Exclusive of calves.

†Includes stockers and feeders.

‡Includes animals purchased for FSRC.

Meat Holdings

Commodity in Pounds	Nov. 1	Nov. 1	Five-Yr.
(000 omitted)	1936	1935	Aver.
Frozen beef	77,624	49,886	45,057
Cured beef*	27,056	15,578	15,651
Lamb and mutton	5,925	1,968	2,500
Frozen pork	74,692	37,693	70,155
Dry salt pork*	43,092	28,641	63,379
Pickled pork*	234,476	174,329	277,097
Miscellaneous	77,388	53,497	59,253
Total meats	540,253	361,592	533,092
Lard	94,495	40,702	70,818
Frozen poultry	105,078	53,156	60,379
Creamery butter	105,319	120,210	102,961
Eggs (case equiv.)	6,133	7,159	7,131

*Cured or in process of cure.

Denver Live-Stock Review

BY W. N. FULTON

Cattle

LIBERAL RUNS OF RANGE CATTLE AND a broad outlet featured the trade at Denver during November. Keen competition ruled in feeders and stockers, which made up the major portion of the supply, and prices on the whole were very satisfactory. Closing quotations on feeder cattle were 50 to 75 cents higher than at the beginning of the month. Fed steers showed an advance of 25 to 50 cents. Heifers closed 25 cents or more lower.

Range beef cows closed generally steady, although there was some fluctuation during the month. Canner and cutter cows closed slightly lower, while bulls were steady. Veals and calves were steady to strong, with some sales 50 cents above those of late October.

Early in November fed steers were ranging up to \$9.50, which was the high point for that time since the fall of 1935. During the middle of the month, however, Nebraska long-fed steers reached \$11 for a new peak, with other sales at \$10 to \$10.75. Grass steers sold at \$8.50 down. Top on fed heifers was \$9.75, paid early in the month. Best price at the close was around \$9.40; many loads were \$8.85 to \$9.25. Range heifers sold for \$7 down.

Many beef cows sold at \$5 to \$5.75, with a good grade at \$4.25 to \$4.75. Cannors and cutters went at \$2.75 to \$4; bulls, \$3.25 to \$4.75. Most veals and calves were \$9 down, with odd head \$9.50 to \$10. Many calves sold at \$6 to \$8; culls down to \$4 and below.

Choice heavy feeder steers topped during the month at \$8.50; best yearlings, \$8.25. In the late rounds many steers sold for \$7.75 to \$8.25, with a fair grade going at \$7 to \$7.50 and plainer steers at \$6 to \$6.90. Feeder heifers were \$7 down; feeder cows, \$3.25 to \$4.50.

Hogs

Despite heavy receipts of hogs, the market was active and prices on butchers closed 35 to 50 cents higher, while sows were 50 to 60 cents up. Feeder pigs and stags were generally steady. Early in November good hogs bulked at \$9.20 to \$9.40. Late in the month best kinds were selling up to \$9.75, with bulk ranging from \$9.60 to \$9.75. Light lights went at \$8.50 to \$9.60.

Packing sows sold late at \$9 to \$9.40. Fat pigs brought \$6.50 to \$8.25; choice kinds, \$8.50. Feeder pigs were \$4.50 to \$5.50.

Lambs

Fat lambs advanced 15 to 25 cents during the month. Feeder lambs were strong to 25 cents higher. Fat ewes were 75 cents to \$1 up. Receipts were heavy and demand strong throughout the month. Feeder lambs were especially

in good demand. Early in November bulk of the good lambs cleared at \$8.25 to \$9. Late in the month desirable lambs earned \$8.25 to \$8.85.

Feeder lambs were \$7.25 to \$8.25 early in November. During the mid-month sessions they reached \$8.60 for a season's top. In the late rounds desirable feeders went at \$8 to \$8.35; plainer lambs, \$7.25 to \$7.85. Top on fat ewes rested at \$3.75, with other good kinds \$3.25 to \$3.50. Plainer loads were \$2.50 to \$3; common ewes \$1.50 to \$2.

Measuring Contents of Tanks

RULES FOR FINDING THE CONTENTS OF variously shaped tanks, as given in a recent issue of *Pastoral Review* (Melbourne), are set out below.

For a round tank: Multiply the diameter by itself, and multiply the result by .7854. This will give the area of the bottom of the tank. Multiply this by the height to get the cubic contents. Supposing the dimensions to be in feet, the result will give you the cubic contents in feet, and, as there are 6¼ gallons in a cubic foot, to multiply the contents by 6¼ will give the cubic contents in gallons.

For square or oblong tanks, the formula is: Length x breadth x depth in feet x 6.24 (result in gallons).

For tanks with regular but sloping sides use the following formula: Length x breadth in feet of top area; length x breadth in feet of bottom area; sum of top and bottom length x sum of top and bottom breadth. Add these three results together, multiply by depth in feet and divide by six. This gives the capacity in cubic feet, and to arrive at gallons multiply by 6.24.

For tanks with irregular sides add together length in feet of both sides at top and divide by two for mean top length. Do the same in connection with width of top ends. Add together length in feet of both sides at bottom and divide by two for mean bottom length. Do the same to ascertain mean width of bottom ends. When these figures are obtained multiply mean of top length by mean of top width; multiply mean of bottom length by mean of bottom width. Multiply sum of top and bottom mean length by sum of top and bottom mean breadth. Add the three results together, multiply by depth, and divide by six. The result is in cubic feet. If gallon contents is required, multiply by 6.24.

JAMES E. POOLE RECOVERING

James E. Poole, our market editor, has been sick. But we have word from him now that his doctor promises him a clean bill-of-health in short order. So we hope soon again to carry his market articles in the columns of THE PRODUCER.

LET US GO FORWARD TOGETHER

A successful business is usually based upon some fundamental principle. This principle in our business has been to give full dollar value in quality value for every dollar received. This statement is fully substantiated by the fact that of thirty carloads of bulls sold this year by our firm, 80 per cent were repeat orders to old customers.

Here are the reasons why you get a full dollar value when you buy a Coon & Culbertson bull: The calves are sired by outstanding Domino bulls . . . their dams are Domino bred . . . they are developed under natural range conditions and receive the proper kinds and amounts of feeds necessary to bring out their inherited qualities.

It is common knowledge among breeders that a hundred-dollar bull can be fed \$15 worth of concentrated proteins in a lot and then be sold on his bloom appearance for \$150. This method of salesmanship does not have a place in our business. We know that a stomach accustomed to such concentrated feeds cannot sustain a bull in active service later on from grass, as nature intended; and, further, when these bulls fail to give complete satisfactory service, repeat orders stop for the breeder . . . and repeat orders are the very life of any breeder.

Our success in producing satisfactory range bulls, as shown by our 80 per cent of all sales to old customers this year, is very gratifying to us, and we feel that ours is a worth-while place among those who may have occasion to buy a load of proved range bulls.

To all our old customers and to those who will be new customers of ours in 1937, we wish to extend our best wishes for the coming year, and we hope, furthermore, that we may have some part in making this your big year, by the opportunity of filling your range bull requirements.

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The New and the Old in Corn

A NEW YELLOW VARIETY OF DROUGHT-resistant corn that produces as well under dry conditions as the time-tried Mexican June White variety has been announced by Dr. P. C. Mangelsdorf, agronomist in charge of corn and cereal breeding at the Texas Experiment Station at Temple.

Golden June, the name of the new variety, is the product of ten years' research in putting yellow color into white corn in such a way that vitamin A is introduced without otherwise changing the make-up of the white variety. "It is particularly well adapted to the region lying from Temple westward, where drought-resistant qualities are an important factor in corn growing," says Dr. Mangelsdorf. The new variety, he says, contains enough vitamin A to keep most live stock in condition, except dairy cows and chicks.

And in another part of the country, says one of our current exchanges—in an Iowa State College greenhouse—far from their natural habitat in sunny Mexico, a few stalks of the plant that some scientists claim is the ancestor of corn, are being nurtured. The plant is called teosinte. The stalks look like puny stalks of corn. The plants have tassels and silks. However, teosinte does not have a cob.

Thousands of years ago, it is said, ancient tribes of southern Mexico developed corn and built on it the maize culture of the Mexicans which exists almost unchanged today. At least, teosinte is the nearest approach to corn found among wild plants, and it is the only wild plant to hybridize naturally with corn, says the report.

FEEDSTUFFS

On December 8 cottonseed cake and meal was quoted at \$36.50 a ton, f. o. b. Texas points. Omaha hay prices on December 7 were as follows: alfalfa—choice leafy, \$20; No. 1, \$17.50 to \$18.50; standard leafy, \$16 to \$16.50; standard, \$15.50; No. 2, \$14.50 to \$15.50; No. 3, \$13 to \$13.50; upland prairie—No. 1, \$15 to \$16; No. 2, \$14 to \$15; No. 3, \$12.50 to \$13.50; midland prairie—No. 1, \$14 to \$14.50; No. 2, \$12.50 to \$13; mixed hay—No. 1, \$15 to \$15.50; No. 2, \$13.50 to \$14; No. 3, \$13 to \$13.50.

EARLIER FEEDING NECESSARY

TO THE PRODUCER: The fall range is awfully dry. But the stock is in very good flesh. We will have to start feeding earlier to hold the animals up. Hay is plentiful at around \$10 in the stack. There will be about the same amount of breeding ewes held over and a few more ewe lambs.

HERMAN R. KUHN.
 Connell, Washington.

FOREIGN

World Agricultural Income Up

AGRICULTURE INCOME HAS RISEN IN nearly all the countries of the world and for nearly all kinds of products, says a report by Director Harold B. Butler of the International Labor Office, Geneva.

Statistics cited show that the spread between maximum and minimum prices has been considerably reduced, signifying that prices have remained more stable; that during the past few years there has been a general rise in prices, especially for products such as wheat, rubber, and cotton; and that prices of coffee, sugar, and rubber, influenced either by government or cartel policy, have been practically stabilized.

Figures also disclose that prices for meat and milk products increased in 1936; that prices for eggs decreased; and that while prices for agricultural products have decreased in the Netherlands and Poland, as compared with 1934 and 1935, they have increased in the United States, Canada, England, Germany, Finland, Yugoslavia, Argentina, Hungary, and New Zealand.

"The cost of production has also increased," says Mr. Butler, "but the rise in selling prices exceeds the increased cost of production, and in consequence the agricultural income is rising.

"The general impression resulting from an examination of reports on the condition of the cotton crop is that this is not a very favorable year," he says. "On the other hand, the position of the world cotton market is influenced by the fact that certain countries, formerly great producers of cotton, have intensified their cultivation, profiting from the upward tendency of the market brought about by the regulation of production adopted in the United States, and that new producing countries have now come into the world market.

"Brazil has begun to export cotton, Japan and Italy are about to increase their cotton production, and the Argentine has considerably increased her area for cotton growing.

"The latest figures concerning animal production," he says, "show that in 1936 pig raising has increased in Canada and the United States and that the number of milk cows in most countries is no longer diminishing.

"Sheep raising showed, until the last few years, a constant fall in numbers. Statistics now indicate, however, that in many countries a considerable increase has taken place; for example, in Germany, Belgium, Estonia, Finland, Algeria, Greece, Lithuania, the Netherlands, Poland, Czechoslovakia, Russia, Yugoslavia, Brazil, Colombia, Egypt,

Guatemala, Haiti, Mexico, and New Zealand. This increase is to be attributed to two causes: the relatively favorable situation of the wool market, and an increase in the consumption of mutton in various countries."

As regards the production of milk and milk products, it was disclosed that cattle raising conditions in a large number of countries of the different continents are good. Milk production from the technical point of view has improved, and from the commercial standpoint the position of the market has been better.

From the Foreign Field

Slaughter in Cuban abattoirs of male cattle, except steers, is now prohibited by decree. The measure is expected to compel cattle raisers to select at an early age the best young bulls desired for breeding, the others being raised as steers for beef. Because of a negligible market for veal, it has been the practice in Cuba to allow bulls to reach maturity without castration, and many were used as draft animals. When necessity prompted, they were made into beef. Such animals provided the type of lean beef domestically demanded.

* * *

Individuals in Russia, rather than the socialized units as such, are the owners of the greater number of animals in the U. S. S. R. Of 20,000,000 milch cows in the union on January 1, 1936, 5,129,000 belonged to the collective and state farms; of 25,900,000 hogs, these groups owned 8,925,000; of 49,900,000 sheep, they owned 23,747,000.

* * *

Argentina's wool clip for 1936-37 is commercially estimated at 348,000,000 pounds, compared with 340,000,000 pounds for 1935-36. Its carry-over is estimated at 18,000,000 pounds and local consumption at 57,000,000 pounds, leaving an exportable surplus of 309,000,000 pounds.

* * *

New Zealand leads all countries in per capita meat consumption, with 236 pounds per person per year. Australia follows, with 202 pounds, after which come Canada, with 144 pounds; Britain, 140 pounds; United States, 136 pounds; Denmark, 125 pounds; and Germany, 110 pounds.

* * *

An "automat" buffet for the sale of prepared rabbit meat will be installed in Prague, Czechoslovakia, because of recent increases in meat prices. "Automats" for several other kinds of meat are in operation, but high prices have put brakes on their success.

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REGARDLESS of experience, every stockman needs his live-stock production and feeding program carefully analyzed and checked in light of prospective supplies and market conditions. The reasons are as follows:

1. Comparatively few stockmen have sufficient information at hand to know what the market situation will be when their live-stock production and feeding program is completed.
2. Also very few stockmen have the statistical and analytical training to make best use of data and information available on current and prospective live-stock markets.
3. Furthermore, stockmen have their own money invested and are unconsciously influenced by possible hazards and by their own hopes rather than by actual conditions.

This check is furnished by the NATIONAL LIVE STOCK MARKET SERVICE, which is available every two weeks at the rate of \$5 per year. In addition, the subscriber is entitled to receive detailed personal service.

For further information write—

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**Welcomes Visitors to the
Cattlemen's Convention**

Artificial fiber in new varieties, said to be equal to wool in most respects, will be manufactured from cellulose products in seven state-assisted factories in Germany by the end of the year. One type of fiber may be used for men's suits without any admixture of wool.

* * *

A northward movement of population in Canada is partly attributed to the taking up of new farms farther north by farmers who have given up their old farms in the drought-stricken areas of the more southern sections.

* * *

Europe's wheat crop, exclusive of Russia, will amount to 1,482,000,000 bushels this year, compared with 1,573,000,000 bushels in 1935. The average yearly crop during the 1930-34 period was 1,526,000,000 bushels.

* * *

Cattle on Canadian farms in 1936 are estimated to number 8,819,100, compared with 8,820,600 in 1935; horses, 2,918,000 in 1936, compared with 2,931,300 last year; hogs, 4,159,700 (3,379,700) and sheep, 3,370,000 (3,568,600).

* * *

Shower baths for pigs have been installed in pig sties at Emu Plains in New South Wales. It has been found that pigs fatten better if they are kept cool in hot weather.

* * *

Artificial wool will be manufactured from milk in a new factory erected in Ferrara, Italy. The factory, the second of its kind, is expected to absorb 22,000 gallons of milk a day.

* * *

The Argentine government recently issued a decree abolishing the guaranteed government minimum price for corn which has been effective for three years.

* * *

The Australian wheat crop is expected to reach a record total of 5,000,000 bushels, with prices twice those of last year.

Fighting forest fires from the air is now being attempted for the first time by the California region of the Forest Service. Several different materials such as water, chemicals, and gases will be dropped from planes in various types of bombs or containers to test their extinguishing or retarding qualities on fires.

Less Beef and Higher Prices

INDICATIONS ARE THAT TOTAL WORLD supplies of beef and veal during 1937 will be somewhat lower than in 1936, with prices continuing on the upward trend, according to a report by the Bureau of Agricultural Economics.

World.—Reductions in cattle numbers below 1934 and 1935 levels are indicated in most of the important commercial producing countries, including some of the large surplus producing countries such as Argentina and Uruguay, as well as such important deficit producers as the United Kingdom and Germany.

Reduced cattle numbers in North America are largely the result of drought and short feed supplies in 1934 and 1936. Cattle numbers also declined in Europe, where the tendency has been to bring live-stock production into closer alignment with domestic feed supplies. In South America some liquidation has taken place in the last four years as a result of the restricted European outlets. In the surplus producing countries of the British Empire, production has been encouraged by preferential treatment in the British market, but cattle numbers so far reported for 1936 are no larger than in 1935.

Most of the beef entering the world trade moves from countries of the Southern Hemisphere to the European market mainly as chilled and frozen beef. Heavy import duties, exchange difficulties, and other trade barriers operating in European countries, especially quantitative restrictions on imports of non-Empire frozen and chilled beef by the United Kingdom, are forcing such surplus producing countries as Argentina and Uruguay to divert a larger number of their cattle into the canned-meat trade for which new markets are now being developed.

United States.—In the United States the total quantity of domestic beef moving to market during 1937 is expected to show a substantial reduction due to the enforced liquidation that has taken place in cattle numbers by reason of the feed grain shortages resulting from the 1934 and 1936 droughts.

Cattle and beef prices are expected to continue at a high level because of reduced supplies and the steady improvement in consumer purchasing power. Supplies are not likely to be supplemented to any large extent by increased imports of live cattle from Canada, because of the short feed grain crops and high feed prices in that country. On the other hand, some further increase in imports of South American canned beef may be expected unless the European market improves.

ERRATUM

A hectare of land is slightly less than two and a half acres—not 2,471 acres. We make this explanation because THE PRODUCER last month, in converting hectares into acres, erroneously used the latter multiple. The foreign note about increased grazing area in the Philippines should have read: "1,024 hectares (approximately 2,530 acres) to 2,000 hectares, (4,942) acres."

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ROUND THE RANGE

Live-Stock and Range Report

WINTER FEED SUPPLIES IN THE WESTERN states, although short in drought areas, are generally good, according to the December 1 report of the Division of Crop and Live Stock Estimates. Much of the drought area still lacks moisture. Live stock is in good condition except in a few dry areas. Mild, open weather during November permitted full use of ranges and pastures and helped conserve feed. November cattle marketings were fairly heavy, but no extensive selling or liquidation took place. Stock sheep are going into the winter in good condition. Condition of ranges was 71 per cent of normal, compared with 74 last month, 81 a year ago, and 78.6 for the 1926-35 average.

Summary of condition by states follows:

Arizona.—Recent rains improved feed prospects in south; farm pastures fully utilized; ranges fair in north; cattle and sheep in fair-to-good condition; early lamb prospects fairly good; farm pasture prices high; early desert feed needed.

California.—Practically no seasonal rainfall in northern half of state; none during November in southern half where feed started; pasture situation acute in many areas; much new feed dried badly; none started in northern half; field and old range feed supplies diminished; hay and other feeds too high for free use; winter outlook generally discouraging; much new feed growth not expected; stock animals in many sections, especially cattle, shrinking; lack of green feed will handicap early lambs; operating costs will be high.

Colorado.—Dry, mild November permitted range feed use; hay and feed ample; some surpluses in mountain and irrigated sections; shortage in eastern dry land; cattle and sheep in very good condition.

Idaho.—Winter ranges very dry; grass short in some sections; pastures and field feeds good and used extensively; hay and other feeds ample; cattle and sheep in very good condition; lambs on pastures and feed made good gain; November marketings heavy; weights above average.

Kansas (western).—Wheat pastures failed to develop as expected; some cattle moved to market or more favored areas; cattle about held their own under mild weather; severe winter may result in heavy marketings and death losses; cattle in only fair condition; feed supplies short.

Montana.—Feeds short in most eastern two-thirds of state; western, southwestern, and irrigated sections amply supplied; much imported feed necessary

in drought areas even for reduced numbers; soil moisture short; stock in fair-to-good flesh, favored by November weather; severe winter means serious feed situation in many eastern areas.

Nebraska (western).—Open, mild weather allowed full use of short range feed; hay ample if winter not severe; feed grains short; concentrates shipped in; cattle in good condition; marketings normal; little forced selling.

Nevada.—Ranges good; moisture needed on winter ranges; hay and other feeds generally ample; cattle and sheep in very good condition.

New Mexico.—Range feed short but well-cured; ranges and hay and other feeds short in northeast and southwest; feed supplies generally ample for mild winter; stock on whole going into winter in good condition.

North Dakota.—Ranges and pastures poor; furnishing little feed except in northeast; hay and feed grains short; heavy feed purchases necessary to hold most stock on hand; stock holding up well.

Oklahoma.—Native pastures poor and short; grain pastures, lacking moisture, failed in expected growth; hay, grains, and other feeds short; severe weather means short feed supplies; stock in fairly good shape.

Oregon.—Grazing close on dry ranges; moisture badly needed; hay and feed grains generally ample; short ranges necessitated feeding in some sections; cattle and sheep generally in good condition.

South Dakota (western).—Little feed on ranges; most hay and grains shipped in; feed supplies below needs; stock in fair condition, thanks to favorable weather.

Texas.—Winter feed prospects good; ranges and other feeds short in some northern areas; considerable surplus feeds in others; wheat pastures need moisture; cattle in very good condition; marketings light; some local demand and restocking; sheep in very good condition; good feed in sheep section; shipments out of state light; much 1937 wool contracted late in November.

Utah.—Fairly good range feed supply; moisture needed for full use of winter ranges; eastern ranges poor; farm pastures good; hay and other feeds ample; stock in very good condition.

Washington.—Fall very dry; little green grass; fairly good supply dry feed on ranges; stubble fields and pastures used extensively; hay and feed grains plentiful; sheep and cattle in good condition.

Wyoming.—Mild, open November favored stock; ranges poor and feeds short in northeast; fair to good in other sec-

tions; hay supplies fairly good; much concentrates necessary in dry areas, even for reduced stock; stock generally in good condition except in dry sections.

Calf-Wintering Experiments

RESULTS OF FEEDING EXPERIMENTS AT the United States Range Live Stock Experiment Station at Miles City, Montana, indicate that alfalfa hay of good quality when fed alone is a satisfactory winter feed for calves to be turned onto native range early in April. The cost of wintering is lower than when high-priced supplements are fed, and the results attained are generally more economical.

The use of silage with alfalfa hay is a decided advantage for wintering purposes when maximum gains are desired and an early sale of the animals from the feed-lot is anticipated. Calves wintered on silage and alfalfa hay carried more condition or fleshing than was desired for maximum utilization of range grass but the gains were economical. The feeding of both alfalfa hay and corn silage is to be recommended only when corn silage can be produced economically.

Complete information about the experiment is given in Technical Bulletin No. 529, entitled "Effect of Different Methods of Wintering Beef Calves, in the Northern Great Plains, on Winter Gains and Feed Costs and on Subsequent Summer Gains."

Heavy Death Loss of Horses

AN EQUINE DISEASE CALLED *encephalomyelitis*, almost unknown until the past five or six years, has killed approximately 30,000 American horses since 1930. Dr. W. H. Hendrix, chief veterinarian of Utah, one of the most greatly affected states, describes the disease as a major American farm problem.

"Since the arrival of the automobile," Dr. Hendrix says, "our horse population has at best been inadequate. If *encephalomyelitis* continues the inroads of the last six years, the horse shortage will become serious."

So little is known of the disease, sometimes inadequately called "brain fever" or "sleeping sickness," that efforts to fight it are largely futile. "We know definitely the disease can be and is spread by mosquitoes. We also suspect horse flies and other insects of being the carriers," declares Hendrix. "First appearing in California in 1931, the disease spread rapidly and in 1933 killed 4,000 horses in Utah alone, together with hundreds of others in the East and Middle West."

Comparatively rare last year, it occurred in epidemic form in the West this spring and has killed several thousand farm horses in Utah, Idaho, Wyoming, and Colorado.

WHY BLACKLEGOL IS MORE POTENT



BLACKLEGOL — an exclusive Cutter development — is entirely different than any other Blackleg vaccine.

It is not only more potent to begin with—but, because of a chemical contained only in Blacklegol, one dose has the same immunizing value as repeated injections of smaller amounts of ordinary vaccines. A large part of the dose of an ordinary vaccine is eliminated from the animal's system before immunity can be built up. In the case of Blacklegol, however, the vaccine is held in the animal's tissues until even the last drop has been used to produce immunity. Insist on Blacklegol — the first product ever to be definitely and unconditionally recommended for the one dose lifetime immunization of suckling calves. Proved by thousands of progressive cattlemen on every cattle range. If not available locally, write direct for quantity prices and the name of your nearest distributor.

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IN ONE SHOT**
regardless of age



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BULLETIN BOARD

Active Cows Make Best Beef

THE THEORY THAT EXERCISED CATTLE yield jaw-exercising beefsteak is out. Experiments of the University of Illinois hold that just the opposite is true, reports an *Associated Press* dispatch.

In the experiment, half the cattle were forced to exercise half a day every day, while the other half remained in their stalls. After three months of this, the cattle were slaughtered. Upon analysis, it was found that meat from the leaner, exercised cattle was the tenderer.

Professor Sleeter Bull, who conducted the experiments, explained it this way:

"In the unexercised cattle we found the muscle cells laced together by cross-connecting tissues, which when they drew together formed tendons connecting with the bone. These cross-connecting tissues made the meat tough.

"In the exercised cattle there were more muscle cells which had formed without increasing the connective tissue. We could only conclude that the exercise caused the increase in muscle cells, making the meat more tender."

What They Say About Meat

RATHER AN AUSPICIOUS REPORT ON THE health value of meat is this little grist of clippings from current exchanges:

League of Nations—"While vegetari-

ans and persons of exceptional digestion would no doubt like to see meat off the menu altogether, it is worth recalling that the recent Technical Commission on Nutrition, appointed by the League of Nations, reported strongly in favor of meat among the 'protective' foods in which modern diets are usually deficient. There is good reason for most of us to keep meat on the menu."

Arctic Explorer—"Vilhjalmur Stefansson, Arctic explorer, told the American Dietetic Association the other day that Eskimos kept good teeth because they did eat meat, and not that they exercised on whale skins and tough steaks. Quoting Mr. Stefansson: 'All deficiency diseases seem always absent from people living wholly on meat. In view of much discussed theories, it is well to specify that certainly there is never a case of scurvy and almost certainly never one of rickets. Tooth decay is absent, pyorrhea is rare or absent.'"

Doctor—"In the case of the Eskimos, notorious meat eaters, Dr. Levine of Creighton University, found a general condition of low blood pressure. In a recent address to the American Congress of Physical Therapy, the doctor declared: 'The Eskimo, as a rule, has low blood pressure, and this is a direct refutation of the argument that excessive meat eating has a tendency to produce high blood pressure. The Eskimo is a great meat

eater. The low blood pressure of the Eskimo bears out the finding of Stefansson, the great Arctic explorer, with reference to the healthfulness of meat eating."

Professor—"The American people are not eating enough of the protein foods which are so essential for good nutrition, Professor Chester M. Jones, of the Harvard Medical School, told the annual session of the American Dietetic Association in Boston. . . . That such a trend is dangerous is shown by the serious consequences which result from the interferences with the absorption of protein characterizing several diseases, he said. To offset these diseases, such foods as meat, liver, and milk must be emphasized in the diet."

Domestic Wool Supply Small

SUPPLIES OF WOOL IN THIS COUNTRY remain relatively small. Even if consumption during the remainder of the present season (to April 1, 1937) is considerably below that of a year earlier, a substantial volume of imports will be needed before the new domestic clip becomes available, says the Bureau of Agricultural Economics.

Stocks of raw wool, tops, and noils, held by dealers, topmakers, and manufacturers, scoured basis, were, on September 26, as follows, with comparisons:

Items in pounds (000 omitted)	Sept. 26 1936	Sept. 28 1935
Apparel wool, total.....	125,930	156,694
Dealers	66,629	77,445
Domestic	57,220	69,194
Foreign on hand and afloat	9,409	8,255
Manufacturers and topmakers	56,311	79,249
Domestic	42,381	68,632
Foreign on hand and afloat	16,930	10,617
Carpet wool, total.....	32,998	36,435
Dealers	3,216	3,080
Manufacturers	29,782	33,355
Tops	26,240	20,662
Noils	10,693	9,936

Statistics for September, 1936, believed to include over 96 per cent of total stocks held by and afloat to dealers, topmakers, and manufacturers on that date; for September, 1935, 97 per cent.

Stop Roaming . . . Buy Your Bulls in Wyoming

70 Yearling Hereford Bulls. The short-legged, deep-bodied, heavy-boned kind. Beau Blanchard and Sir Gomez breeding.

A. B. HARDIN, Savageton, Wyoming

Registered Herefords, Bulls and Heifers

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CHEYENNE, WYOMING

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New Meat-Cooking Facts

MASTER MINDS IN THE MEAT-COOKERY field are finding out things about meat. They know now, for instance, that searing is unnecessary; that basting is a waste of time; that full-blast sizzling of roasts sends tons of meat out the window; and that turning steaks in the broiling process does not help—one flip is enough.

Back of this new knowledge, which, by the way, refutes most of the old meat-cookery tenets passed down through generations, are machines devised to give accurate measurements of meat quality, such as the colorimeter, for determination of color; the pressometer, for evaluation of cuts according to juice content; the Warner-Bratzler shear, for measuring tenderness and cutting resistance. Back of it also are tests by many expert palates.

And now the results of ten years of

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Texas Livestock Marketing Association

Fort Worth, Kansas City
and
26 Other Leading
Markets

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live stock and live-stock products.

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(INCORPORATED)

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FORT WORTH, TEXAS

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Cooperation with Producers

—a permanent Safeway policy

In our work to bring about more efficient distribu-
tion of farm products we have established these prin-
ciples and policies:

1. Safeway is opposed to the use of fruits, vegetables and other agricultural products as "loss leaders"—the practice of selling farm items below cost to lure customers.
2. Safeway does not subsidize farmers—the practice of financing certain farm production and using this to force down prices.
3. Safeway does not own or operate any farms or compete with farmers in the production of agricultural products.
4. Safeway pays the farmer as much or more for his product as he can obtain elsewhere, and is proud of that fact.
5. Safeway purchases are made regularly, thereby assisting in stabilizing the produce market.
6. Safeway endorses the program of proper grading and proper labeling of products.
7. Safeway welcomes discussions with all agricultural groups and individual farmers for better understanding between farmer and distributor.

In the nation-wide Farmer-Consumer Beef Sale sponsored by the Chain Stores of America, July 31 to August 21, Safeway was proud to play an important part.

And proud also that we pioneered these sales in our territory several years ago and have been carrying them on every year.

We are pledged to work, in every practical way, for distribution which lowers retail prices, enables people to afford more food . . . and pays more money back to you!

L. A. Warren

President of Safeway.

intensive meat-cookery studies carried on in home economics laboratories of the Department of Agriculture and agricultural colleges are to be contained in a new textbook, which received its final touching up at a recent Chicago conference of experts in meat investigation.

So when the housewife follows the new textbook in its instructions to prepare, for example, tender meats by applying dry heat, and less tender ones by giving the cuts moist heat, she is not experimenting—she is cooking correctly. It is hinted that even friend husband, backed by the ten years of research, can now prepare the perfect roast.

Bulletins in Brief

Government sausage grading, after a trial period of more than a year and a half, has proved popular with consumers and manufacturers of sausage products, reports the Bureau of Agricultural Economics. At the present rate it is estimated that more than 300 million pounds of sausage products will be graded by the bureau this year. It is also reported that an increasing proportion of turkeys are going to market with their grade certified by the government.

Farm employment dropped seasonally during October as harvesting of crops neared completion. The number of family

Hardy Recleaned Alfalfa Seed, \$10.50; Grimm, \$11.50; White Sweet Clover, \$5.90. All 60-lb. bushel. Track, Concordia. Return seed if not satisfied. Geo. Bowman, Concordia, Kansas.

LONG STEER HORNS

STEER HORNS, polished and mounted, seven feet spread, for sale cheap to close out collection of old relics. Fine decoration. Rare opportunity. Lee Bertillion, Mineola, Texas.

BALDWIN COUNTY, ALABAMA. Several thousand carloads early crops profitably produced and shipped this year. Unexcelled for general farming, early truck, dairying, poultry, and live stock. Ample rainfall. Healthful climate. Many satisfied Northern farmers now there. Cash markets at shipping stations. Improved and unimproved productive lands at attractive prices. For information and free copy "The Southland" write E. J. Hoddy, General Development Agent, Dept. B-14, Louisville & Nashville Railroad, Louisville, Ky.

11,000-ACRE CATTLE RANCH in northern California; controls 30,000 acres of Forest Reserve; 200 acres farming and alfalfa land; good ranch house; 3 large barns. Will carry 1,500 to 2,000 head yearly; both winter and summer range. Price \$7.50 per acre. Terms can be arranged.

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RANCHES, large or small, for sale, exchange, or lease, in Texas, New Mexico, Arizona, Wyoming, Montana, California, Canada, Central and South America, Africa, and islands of the sea. J. D. FREEMAN, Gunter Building, San Antonio, Texas.

workers declined from 214 per 100 farms to 199 during the month, and the number of hired hands dropped from 107 to 95. The average decline in employment of farm workers during October amounted to 10 per 100 farms for the five-year period 1928-32, while the average drop in the number of hired hands employed amounted to 21 per hundred.

Trucks hauled more live stock to the sixty-nine public stock yards of the country in the first seven months of 1936 than did railroads. Cattle trucked numbered 4,712,000 head (3,273,000 head were sent by rail); calves trucked totaled 2,184,000 head (1,495,000 by rail); hogs, 9,132,000 (4,666,000); sheep and lambs, 3,358,000 (9,458,000). Ten years ago trucks hauled less than 5 per cent of the cattle, 14 per cent of the calves, 14 per cent of the hogs, and 10 per cent of the sheep and lambs.

Wage increases of 7 per cent have been granted to Chicago and some outside plant employees of Armour and Company, Cudahy Packing Company, Swift and Company, and Wilson and Company, and also to employees of Hormel and Company, Minnesota. This increase will bring the wage level to nearly 20 per cent above the pre-depression high in 1929 and nearly 50 per cent above the depression low in 1932.

Milk production has staged a comeback since the mid-summer drought, due to improvement in pastures, culling of herds, and supplementary feeding stimulated by higher prices of dairy products, according to the Bureau of Agricultural Economics. Milk production per cow on October 1 was 12.82 pounds—about 5 per cent more than a year earlier and the highest for that date since 1928.

Swift and Company has selected Lake Charles as the site for a new packing plant that will employ 200 men at the start and kill several hundred head of cattle daily. Arthur L. Gayle, president of the Louisiana Cattlemen's Association, did most of the work in "selling" Swift and Company on Lake Charles.

Navajos at Canyon de Chelly National Monument, Arizona, are predicting the most severe winter in years, and the Weather Bureau is telling the farmers to look forward to another warm winter in this area, with sub-normal rainfall.

Six hundred dollars was the average price paid for 56 Herefords at the October 30 sale by the Wyoming Hereford Ranch, of Cheyenne. Thirty bulls averaged \$715; twenty-six heifers, \$467.

Two thousand new refrigerator cars

are to be put in use by the Union Pacific and the Southern Pacific railroads, entailing, along with reconstruction of 1,750 cars, a cost of \$10,500,000.

Wage increases of 10 per cent for textile workers have been announced by wool manufacturers in the New England area.

Fires last year blackened more than 40,000,000 acres of forest land—an area larger than the State of Illinois.

PENNSYLVANIA T.B. ACCREDITED

Pennsylvania has been officially designated as a modified accredited area by the Department of Agriculture. It is the forty-third state to be given that designation.

Tuberculosis eradication work in Pennsylvania was started in a co-operative way by state and federal authorities in 1918 and has been carried on without interruption since that time. Of the state's sixty-seven counties, which now have about 1,500,000 cattle, several were highly infected when the work was undertaken. Now the disease has been reduced to less than 0.5 per cent, which is the requirement for accreditation.

SEPTEMBER MEAT CONSUMPTION

Federally inspected meats available for consumption in September, 1936 and September, 1935, are given as follows: Beef and veal—consumption in September, 1936, 559,000,000 pounds; per capita, 4.3 pounds; September, 1935, 472,000,000; per capita, 3.7; pork, including lard—consumption in September, 1936, 456,000,000; per capita, 3.6; September, 1935, 301,000,000; per capita, 2.4; lamb and mutton—consumption in September, 1936, 60,000,000; per capita, 0.47; September, 1935, same; total—September, 1936, 1,075,000,000; per capita, 8.4; September, 1935, 834,000,000; per capita, 6.5.

AAA EXPENDITURES

The November 30 report of expenditures under the AAA from May 12, 1933, through October 31, 1936, (exclusive of cotton option and cotton producers' pool transactions) shows the following outlay: Administration, \$103,597,970; rental and benefit—cotton, \$347,876,528; wheat, \$325,862,649; tobacco, \$61,615,745; corn-hogs, \$487,639,755; sugar, rice, and peanuts, \$94,697,831; removal and conservation of surplus—hogs, \$43,254,314; dairy products, \$23,967,821; wheat and flour, \$6,241,754; peanuts, sugar and syrup, and miscellaneous, \$8,881,928; drought relief, food conservation, and disease eradication operations—cattle, \$140,317,904; sheep and goats, \$7,709,864; seeds and feed and

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formance payments—\$43,037,961; other
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tax refunds, \$45,324,696; total expend-
itures—\$1,780,760,877.

NEW BOOKS AND PAMPHLETS

The National Live Stock and Meat
Board has published a new reference
book which covers concisely twelve es-
sential steps in accurate retail meat
pricing. It bears the title "Pricing

Retail Meat Cuts." It is designed to
assist men of the trade with one of
their important problems.

A series on "Selecting, Fitting, and
Showing Live Stock and Poultry" has
been printed by the Interstate Printing
Company, Danville, Illinois. The book
on beef cattle contains 134 pages, well
illustrated. Herdsmen, exhibitors, and
boys and girls in 4-H Clubs and voca-
tional agriculture will find the book of
especial interest. The books are priced
at \$1 each, or \$4.80 for the set of six.

A new book on sheep, entitled "The
Golden Hoof," published by Sheep
Breeder, Incorporated, Union Stock
Yards, Chicago, now is available. The

price is \$2.25. Various chapters are
written by leading sheep authorities in
the country.

The National Cottonseed Products
Association, Santa Fe Building, Dallas,
Texas, has just released a 48-page book
on "1937 Feeding Practices." It may
be had by request to the association.

A revised edition of "Hercules Dyna-
mite on the Farm," an illustrated book-
let describing in detail recommended
methods for ditch, stump, boulder, soil,
and gully blasting, and tree planting
and tree rejuvenation by blasting, is
now made available by the Hercules
Powder Company, Wilmington, Dela-
ware.

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GEORGE L. MEE.....Wakefield 2755
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a Happy and Prosperous New Year.*

*Every business day since 1890 it has
been our privilege to cooperate with
the live stock fraternity in supply-
ing meats and meat products to the
nation. During the coming year it
will be our purpose to continue to
promote in every way possible to us
the common interests of our live stock
producer friends and our company in
the service of the consuming public.*

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PURITAN Beef • Lamb
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AFTER ALL — "THE TASTE TELLS"

WE recall, with
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It is our sincere hope
that your meetings in
El Paso will be
even more
successful!



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